

Propuesta de valor



Adquisición e instalación de sistema de detección
y supresión de incendios,

Comparación de Precios JCE-CCC-CP-2022-0025

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Revisión del documento

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Confidencialidad

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LAS PARTES acuerdan que el contenido de este documento es de uso exclusivo de dichas partes, para el consumo técnico, administrativo y comercial de referencia para los servicios presentados por IQTEK, las configuraciones, despliegue y trabajos sugeridos por IQTEK en las facilidades de EL CLIENTE.

La finalidad de este documento es ilustrativa, el mismo no puede ser tomado como referencia por ninguna de LAS PARTES como instrumento o soporte para ningún tipo de alcance o contrato de proyectos futuros.



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IQTEK SOLUTIONS

Sobre nosotros

Somos una consultora tecnológica con presencia regional en Guatemala, El Salvador, Panamá, Puerto Rico, Jamaica, Trinidad y Tobago y sede en República Dominicana, que apuesta por una cultura que fomenta el uso de la tecnología para hacer más productivas y eficaces a las empresas.

IQTEK ayuda a las organizaciones de todos los sectores a tener éxito en su evolución digital, que implica transformar modelos de negocio, optimizar la experiencia de los clientes y de los ciudadanos, y mejorar la capacidad de innovación de los equipos de trabajo.

OBJETIVO

Ofrecer soluciones de tecnologías de información y comunicaciones confiables, fundamentadas en nuestras alianzas estratégicas con los líderes mundiales de la industria; así como el equipo técnico con los más altos estándares de capacitación, profesionalidad y enfoque en servicios del área para ofrecer una ventaja competitiva.

MISIÓN

Convertirnos en los proveedores y asesores de confianza de nuestros clientes, para de esta manera ofrecerles soluciones de tecnologías de la información y comunicaciones de alta calidad mundial aprovechando nuestra vasta experiencia, conocimiento y las soluciones tecnológicas con los fabricantes líderes del mercado.

VISIÓN

Ser la empresa líder de la región en la oferta de soluciones de tecnologías de la información, de comunicación y servicios gestionados innovadores. Además, ser reconocida por contar con un equipo profesional con especialistas certificados en las diferentes soluciones que proveemos y las certificaciones de mayor prestigio de la industria.





IQtek
SOLUTIONS

“IQTEK SOLUTIONS es una organización con una impresionante capacidad de adaptabilidad con una comprensión ergonómica del entorno empresarial en constante cambio”.

Industry Era, 10 Best CEOs of 2020.

9 años dedicados a servir

Con más de 9 años de presencia en el mercado, IQTEK tiene como misión el éxito de nuestros clientes. Nos mueve la satisfacción del logro de las metas alcanzadas, siempre apostando por la tranquilidad de nuestros clientes apoyados en soluciones confiables y seguras. A lo largo de nuestra historia hemos venido innovando de forma disruptiva para estar a la vanguardia de la industria, aplicando los más altos estándares, personal capacitado y un equipo motivado por servir.



Nuestras oficinas

Nuestro compromiso es con el éxito de nuestros clientes, es por esto por lo que contamos con presencia regional en todo el Caribe y Centroamérica.

Hemos desarrollado proyectos de impacto regional tanto para el sector público como para el sector privado. Contamos con un equipo dedicado para atender sus necesidades.





IQtek
SOLUTIONS

Nuestras Soluciones

Contamos con un amplio portafolio dinámico de soluciones de tecnologías de la información y comunicaciones disponible para cubrir todas sus necesidades.

Tenemos una capacidad técnica-consultiva y una red de aliados importantes, que nos permiten ofrecer soluciones tecnológicas completas para su tranquilidad y continuidad de negocio.

En IQTEK entendemos sus necesidades, es por esto que nuestro portafolio está adaptado a sus necesidades. Contamos con soluciones en áreas de:

- ✓ Digital Ready Infraestructura
- ✓ Business Transformation
- ✓ Software Services
- ✓ IT Services

Credenciales

Contamos con las más altas certificaciones del mercado, así como premios y logros de la región para nuestro equipo de tecnología, servicio al cliente, soporte, SOC y NOC.



Espacio físico

Todas nuestras soluciones están basadas en la optimización del desempeño, espacio y disponibilidad de servicio, en IQTEK proveemos soluciones integradas que modernizan su infraestructura física. Contamos un portafolio amplio de soluciones de infraestructura física para Datacenter, Cuarto de TI y Cuartos Críticos, incluyendo componentes, servicios y software para arquitecturas tradicionales, hiper convergencia y arquitecturas de TI customizadas.

INFRAESTRUCTURA

Contamos con soluciones para el Centro de Datos, la nube privada, pública o híbrida, así como para las iniciativas tecnológicas de hardware y de software. Somos expertos en, Hiperconvergencia, IoT, Seguridad, Colaboración, Contact Center, Nube, IVR, Redes, Data Center.

TRANSFORMACIÓN DIGITAL

Contamos con una fábrica de software para sus necesidades de transformación, nuestra experiencia se destaca en Robotic Process Automation, Inteligencia Artificial, Fintech, Big Data, Customer Experience, Chatbot, Omnicanalidad, Digital Sales, Software Factory, Open Baking, Microservicios.

CIBERSEGURIDAD

Nuestro Security Operation Center (SOC) le brinda todas las herramientas para mantenerse seguro, en adición contamos con soluciones tales como: Endpoints, Visibilidad de Infraestructura, Automatización de Aseguramiento, Capacitación.



IQDIGITAL CHANGE

“La transformación digital es un proceso imparable, acelerado por las empresas nativas digitales que se incorporan al mercado y que ofrecen facilitar la relación con sus clientes, para conseguir excelencia en los niveles de satisfacción.”

IQTEK ha diseñado un modelo que evalúa la madurez en la digitalización de las organizaciones en las diferentes industrias para brindar en cada caso, de manera personalizada y de acuerdo con las necesidades concretas, la estrategia que deben seguir estas para hacer de la tecnología una ventaja competitiva, en donde la arquitectura tecnológica se convierte en una plataforma de transformación digital asociada a aceleradores de innovación, como el Internet de las Cosas o la Inteligencia Artificial.

IQDigitalChange es una plataforma de transformación inteligente que combina servicios tecnológicos especializados con asesoramiento personalizado para que cualquier organización tenga un crecimiento exponencial.

Desde IQDigitalChange proveemos de manera integral las últimas tecnologías de vanguardia: Inteligencia Artificial, Robotic Process Automation, Omnicanalidad, Digital Sales o Personal and Business Finance Management. Todo ello, sobre un marco metodológico que permite acelerar cada proceso de transformación y disrupción.





Software Factory

Nuestros servicios permiten alinear las estrategias del negocio con los requerimientos de desarrollo de aplicaciones en sus iniciativas de transformación digital, a través del uso de metodologías ágiles las cuales nos permiten elaborar soluciones centradas en la experiencia del usuario, otorgando la flexibilidad de trabajar con múltiples tecnologías las cuales nos permiten adaptarnos a las preferencias tecnológicas de nuestros clientes.

- Arquitecturas empresariales de Microservicios
- Desarrollo de microservicios, APIs y soluciones de fábrica de servicios, de integración, desarrollo de portales y aplicaciones web
- Proceso de entrega y desarrollo continuo (DevOps)
- Desarrollo de aplicaciones empresariales
- Aseguramiento de calidad y pruebas automatizadas
- Diseño y desarrollo de aplicaciones móviles híbridas y nativas
- Desarrollo de aplicaciones para wearables
- Data Analytics/Big Data
- Inteligencia Artificial

“Creamos experiencias y soluciones digitales que permiten acelerar sus iniciativas de transformación digital”



IQ CYBERSOC

SOC con inteligencia de gestión de amenazas

Respaldado por TIC DEFENSE el primer CSIRT privado del mundo acreditado por Carnegie Mellon, que brindará servicios para la protección de la información y el control de la suplantación de la identidad digital.

Entre los servicios que ofrecemos, se encuentran:

- Analítica de seguridad
- Detección de intrusión
- Análisis de datos de registro
- Monitoreo de integridad de archivos
- Detección de vulnerabilidades
- Evaluación de la configuración
- Respuesta a incidentes
- Cumplimiento normativo
- Monitoreo de seguridad en la nube
- Analítica de seguridad, correlación de eventos y gestión de bitácoras

“Primer SOC con inteligencia de gestión de amenazas en Rep. Dominicana y el Caribe”



TIC DEFENSE CERT

Authorized to Use CERT™
CERT is a mark owned by
Carnegie Mellon University

Computer Emergency
Response Team

CERT: Centro en Atención a Incidentes Cibernéticos
(Buscar: TIC DEFENSE CERT)
<https://www.sei.cmu.edu/education-outreach/computer-security-incident-response-teams/authorized-users/index.cfm>



TIC DEFENSE CSIRT

CSIRT

National Computer Security Incident
Response Team

CSIRT: Centro Nacional en Atención a Incidentes Cibernéticos
Unica empresa privada en el mundo
(Buscar TIC DEFENSE o México)
<https://www.sei.cmu.edu/education-outreach/computer-security-incident-response-teams/national-csirts/>





Nuestra misión es la prevención, detección y gestión de los incidentes que afectan a las instituciones contra los delincuentes cibernéticos que intentan poner en riesgo sus activos de información estratégicos.

Contamos con servicios gestionados en tiempo real para la detección y defensa de situaciones de ataques externos y/o internos respecto a la seguridad de la Institución.

Fortalezas

- ✓ Alianza estratégica con TIC DEFENSE
- ✓ Motores de ciber patrullaje
- ✓ Presencia global y alimentación de información de amenazas en múltiples
- ✓ Equipo de respuesta inmediata
- ✓ Personal certificado
- ✓ Infraestructura de ciberseguridad propia
- ✓ Plataformas propias de ciberinteligencia
- ✓ Aliados a las principales agencias de ciberseguridad nacionales e internacionales
- ✓ Apegados a estándares nacionales e internacionales: PCI, ISO 27001, COBIT, ISO 3100, NIST, OWASP, Cloud



SERVICIOS PROFESIONALES

Ofrecemos nuestros servicios profesionales a demanda para el diseño, configuración, soporte, mantenimiento y administración de la base instalada, diseñados para cubrir las diferentes necesidades para garantizar la continuidad de su negocio.

Nuestro departamento de servicios cuenta con personal capacitado y certificado bajo los más importantes fabricantes y entidades certificadoras independientes de la industria.



IQSERVICE

Nuestros ingenieros a su disposición, contamos con diferentes paquetes de servicios profesionales ajustados a su medida para responder a sus necesidades de servicios de implementación. Nuestro personal capacitado puede apoyarlo en la configuración de nuevas funcionalidades, instalación de nuevas soluciones, actualización de plataformas o cualquier otra necesidad.

IQCARE

Este servicio está diseñado para garantizar el soporte por especialistas capacitados en las diferentes plataformas que representamos. IQCARE se basa en soporte sobre los sistemas de Hardware y Software de Nuestros Clientes. IQCARE cuenta con distintos planes que se adaptan a las diferentes necesidades de acuerdo con el tamaño de su empresa.

IQMANAGE

Nuestra oferta de servicios administrados. Brindamos administración efectiva de la plataforma tecnológica de su empresa con personal capacitado y certificado con las más altas certificaciones del mercado. Nuestro personal experimentado garantiza el éxito de sus metas, garantizando la operatividad de su plataforma, delegándonos la gestión y permitiéndole mantener su foco en el negocio.



Solución Propuesta

En nuestra propuesta estaremos ofertando una solución que satisface y excede los requerimientos técnicos y funcionales solicitados por El Cliente para este proyecto.

Dentro de nuestra propuesta estamos suministrando los siguientes componentes para cumplir con los requerimientos que ameritan.

Componentes de la solución propuesta

Lista Componentes y servicios Ofertados

Descripción del Equipo	SKU	Cant
Componentes		
DATA CENTER CENTRAL		
Panel direccionable 127 puntos ipa-100 potter ul/fm	IPA-100 POTTER	1
Batería 12 v, 7 amp, (lc)	BATERIA 12 V	2
Protector contra corto circuito elect. Conexión c/cables dtk120hw ul/fm	DTK120HW	1
Detector foto direccionable pad200-pd potter ul/fm	PAD200-PD	8
Base 6" detector direccionable pad100-6b potter ul/fm	PAD100-6B	8
Pulsador release rms-1t potter ul/fm	RMS-1T	1
Abort switch ul/fm potter	ABORT SWITCH	1
Modulo monitor doble pad 100-dim potter ul/fm	PAD 100-DIM	2
Modulo control de notificación pad 100 nac potter ul/fm	PAD 100 NAC	1
Campana de exterior 6	PCD-6-24	1
Sirena combinada celectable ceiling strobe/ chs-24r potter ul	STROBE/ CHS-24R	1
Cilindro p/sistema contra incendio de 601lbs válvula 21/2 cv14813-500	CILINDRO	1
Abrazadera p/ cilindro contra incendio 322lb & 601lb st10600	ST10600	2
Novec1230 (per pound lb) n1230	NOVEC1230	385
Manómetro con switch de supervisor de presión integrado sv-5011-500ps	SV-5011-5000PS	1
Protector de manómetro 1.0" x 1.25" gg1.0	GG1.0	1
Nozzle para pared n180-2.5-a,180, 2.5"	N180-2.5-A,180, 2.5"	2
Pistón actuador ma3033 mecánico	MA3033	1
Válvula selenoide eléctrica para sistema contra incendio solea45	SOLEA45	1
Releasing circuit disable	SWITCH RCDS-1	1
Materiales de instalación	Materiales	1
Costo de instalación	SERV 02	1
DETECTOR POR ASPIRACIÓN DE DETECCIÓN TEMPRANA. MAX 668 SQM, UNA ZONA. SFD-ASD720 MARCA SAFE UL/FM	SFD-ASD720	1
COSTO DE INSTALACION ASD	SERV 03	1
KIT MATERIALES DE INSTALACION ASD	Materiales	1
EXTINTOR HALOTRON 5LB BADGER	BG-24567	1

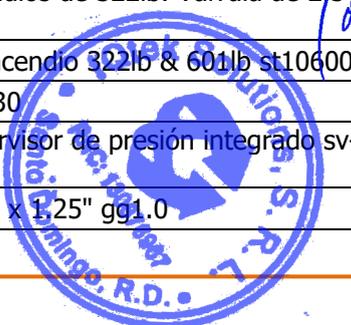


CUARTO UPS SEDE CENTRAL

Detector foto direccionable pad200-pd potter ul/fm	PAD200-PD	4
Base 6" detector direccionable pad100-6b potter ul/fm	PAD100-6B	4
Pulsador release rms-1t potter ul/fm	RMS-1T	1
Abort switch ul/fm potter	ABORT SWITCH	1
Modulo monitor doble pad 100-dim potter ul/fm	PAD 100-DIM	2
Modulo control de notificación pad 100 nac potter ul/fm	PAD 100 NAC	1
Campana de exterior 6	PCD-6-24	1
Sirena combinada celectable ceiling strobe/ chs-24r potter ul	STROBE/ CHS-24R	1
Cilindro p/sistema contra incendio de 164lbs válvula 1.25" 360 psi cv14817-360	CILINDRO	1
Abrazadera p/ cilindro contra incendio 40lb & 76lb	ST10200	1
Novец1230 (per pound lb) n1230	NOVEC1230	121
Manómetro con switch de supervisor de presión integrado sv-5011-500ps	SV-5011-5000PS	1
Protector de manómetro 1.0" x 1.25" gg1.0	GG1.0	1
Nozzle para pared n180-1.5-a,180, 1.5"	N180-1.5-A,180, 1.5"	2
Pistón actuador ma3033 mecánico	MA3033	1
Válvula selenoide eléctrica para sistema contra incendio solea45	SOLEA45	1
Releasing circuit disable	SWITCH RCDS-1	1
Materiales de instalación	Materiales	1
Costo de instalación	SERV 02	1
DETECTOR POR ASPIRACIÓN DE DETECCIÓN TEMPRANA. MAX 668 SQM, UNA ZONA. SFD-ASD720 MARCA SAFE UL/FM	SFD-ASD720	1
COSTO DE INSTALACION ASD	SERV 03	1
KIT MATERIALES DE INSTALACION ASD	Materiales	1
EXTINTOR HALOTRON 5LB BADGER	BG-24567	1

DATA CENTER LA ROMANA

Panel direccionable 127 puntos ipa-100 potter ul/fm	IPA-100 POTTER	1
Batería 12 v, 7 amp, (lc)	BATERIA 12 V	2
Protector contra corto circuito elect. Conexión c/cables dtk120hw ul/fm	DTK120HW	1
Detector foto direccionable pad200-pd potter ul/fm	PAD200-PD	4
Base 6" detector direccionable pad100-6b potter ul/fm	PAD100-6B	4
Pulsador release rms-1t potter ul/fm	RMS-1T	1
Abort switch ul/fm potter	ABORT SWITCH	1
Modulo monitor doble pad 100-dim potter ul/fm	PAD 100-DIM	2
Modulo control de notificación pad 100 nac potter ul/fm	PAD 100 NAC	1
Campana de exterior 6	PCD-6-24	1
Sirena combinada celectable ceiling strobe/ chs-24r potter ul	STROBE/ CHS-24R	1
Cilindro p/ sistema contra incendios de 322lb. Válvula de 2.5" 360 psi	CILINDRO	1
Abrazadera p/ cilindro contra incendio 322lb & 601lb st10600	ST10600	2
Novец1230 (per pound lb) n1230	NOVEC1230	198
Manómetro con switch de supervisor de presión integrado sv-5011-500ps	SV-5011-5000PS	1
Protector de manómetro 1.0" x 1.25" gg1.0	GG1.0	1



Nozzle para pared n180-2.0-a,180, 2.0"	N180-2.0-A,180, 2.0"	2
Pistón actuador ma3033 mecánico	MA3033	1
Válvula selenoide eléctrica para sistema contra incendio solea45	SOLEA45	1
Releasing circuit disable	SWITCH RCDS-1	1
Materiales de instalación	Materiales	1
Costo de instalación	SERV 02	1
DETECTOR POR ASPIRACIÓN DE DETECCIÓN TEMPRANA. MAX 668 SQM, UNA ZONA. SFD-ASD720 MARCA SAFE UL/FM	SFD-ASD720	1
COSTO DE INSTALACION ASD	SERV 03	1
KIT MATERIALES DE INSTALACION ASD	Materiales	1
EXTINTOR HALOTRON 5LB BADGER	BG-24567	1

Servicios sobre la instalación y diseño para el sistema de detección y supresión de incendios para las áreas del Deta cente central, Cuarto de UPS y Data Center de la Romana

Se propone sistema automatizado de supresión por inundación total con agente limpio fabricado con un proceso conocido como fluoración electroquímica.

Con capacidad de detección temprana alertas (visuales y sonora) y monitoreo remoto y con capacidad de integrarse con otro sistema de monitoreo.

El agente utilizado de ser seguro para uso en espacios ocupados, ambientalmente sustentable, no ser conductor eléctrico, capaz de extinguir un incendio en su etapa incipiente y reconocido por estándares internacionales, tales como NFPA 2001 e ISO14520.

Se propone agente fabricado bajo las normas ISO 9001 E ISO 14001

El equipo propuesto listado por UL y aprobado por FM y el agente extintor deberá ser un componente reconocido por UL o FM para uso en el sistema.

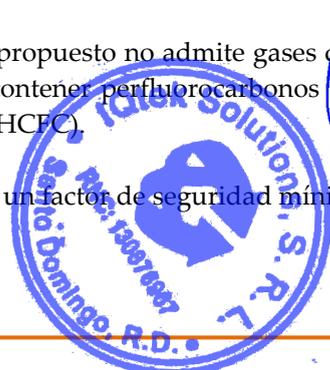
Los cilindros del sistema estarán etiquetados indicando el fabricante del sistema y la marca del agente.

El fluido de agente limpio debe tener un potencial de agotamiento de ozono (PAO) igual a cero. El PAP debe estar en conformidad con la Agencia de Protección Ambiental (EPA) de los Estados Unidos.

El fluido agente limpio propuesto tiene potencial de calentamiento global (GWP) de > 1 (100 años ITH).

El fluido de agente limpio propuesto no admite gases de efecto invernadero ni ser agotador de ozono. Tampoco debe contener perfluorocarbonos (PFC), hidrofluorocarbonos (HFC) ni hidroclorofluorocarbonos (HCFC).

El agente limpio debe tener un factor de seguridad mínimo del 60% entre el porcentaje de



concentración de diseño y el nivel sin efecto adverso observado (NOAEL) para los peligros de clase A y C.

La concentración mínima de extinción (MEC) determinada por la prueba según las normas reconocidas de los laboratorios de prueba (es decir, UL 2166, FM 5600) no deberá ser superior al 3,3%.

El sistema propuesto esta certificado por el fabricante del sistema de supresión de incendios para que tenga un nivel de ruido durante la descarga del agente que no exceda los 110 bB, de 0,5 a 5,0 kHz, por un período mayor a 20 segundos, a una distancia de tres pies de la tobera de descarga de gas.

El fabricante deberá proporcionar pruebas certificadas que documenten los niveles de ruido medidos y registrado por LZFmax según la frecuencia central de banda de 1 /3 de octava u otro medio aprobado

Notas

- En el **ITEM 11** del pliego no se indico el numero de parte mas se incluyo el numero de parte que fabrica recomendó para este proyecto.
- El número de parte del contrato de soporte de Software del **ITEM 12** que aparece en el pliego de condiciones (AP9484), esta errónea y se colocó el Numero de parte que fabrica recomendó para este proyecto (WMS1YRENT).
- En el **ITEM 6** para los sensores interruptor de puerta, que según el modelo elegido por el cliente (**NBES0313**), este no es compatible con el Netbotz 750, cotizado, salvo se utilice otros componentes no cotizados como él (NetBotz Wireless Sensor Pod 180). En ese sentido, le agregamos el sensor (**NBES0302**), que si es compatible

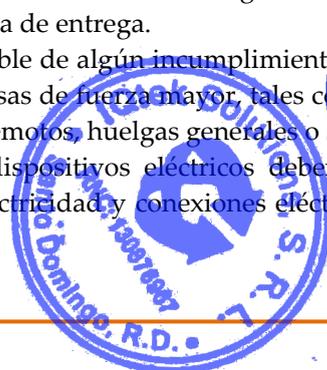
Tareas no incluidas

Dentro del alcance de este proyecto no están incluidas tareas adicionales a las listadas anteriormente, en caso de que se requiera realizar una actividad no prevista en lo anterior mencionado.

Consideraciones y premisas

Las obligaciones asumidas por IQtek en esta propuesta de solución tecnológica se refieren únicamente a la entrega de los equipos y productos detallados en esta propuesta.

- Todos los equipos y productos serán entregados de acuerdo con lo especificado por el cliente en el cronograma de entrega.
- IQtek no será responsable de algún incumplimiento de sus obligaciones cuando estas se vean afectadas por causas de fuerza mayor, tales como motines, golpe de estado, guerra o conmoción civil, terremotos, huelgas generales o similares.
- Todos los productos/dispositivos eléctricos deben cumplir con las reglamentaciones vigentes relativas a electricidad y conexiones eléctricas y Leyes vigentes aplicables a la materia.



- Los equipos no deben ser alterados de ninguna manera que pueda ir en contra de dichas reglamentaciones.
- Los equipos deben estar instalados de acuerdo con las instrucciones del fabricante.
- Los equipos deben ser utilizados de la manera que el fabricante lo indique.
- Todas las reglamentaciones, códigos o leyes de seguridad eléctrica deben ser acatados durante la instalación.

Son Responsabilidades de EL CLIENTE

EL CLIENTE nombrará uno o varios “Gerente de Proyecto” que tendrá la autoridad de representarlo en todos los asuntos relacionados con el Servicio objeto de esta Propuesta de Servicios, quien recibirá toda comunicación de IQTEK referida a este Servicio y tendrá la autoridad para actuar a nombre de EL CLIENTE en todos los aspectos de este documento. Si EL CLIENTE remplace a su Gerente de Proyectos, deberá notificar a IQTEK, por escrito, dentro de un plazo no mayor de cinco (5) días, el nombre del sustituto.

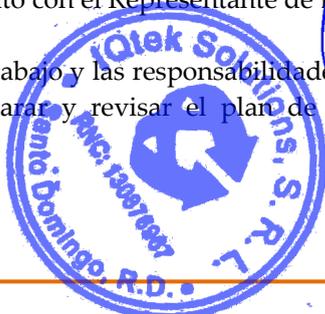
Las responsabilidades del Gerente de Proyectos incluirán:

- Servir de intermediario entre el equipo de especialistas de IQtek y todos los departamentos de EL CLIENTE que participen en este Servicio.
- Administrar el Procedimiento de Control de Cambios del proyecto en conjunto con el Gerente de Proyectos de IQtek.
- Obtener, validar y proveer la información y las aprobaciones necesarias para el Servicio en un plazo máximo de un (1) día laboral, a menos que se acuerde previamente un plazo diferente.
- Ayudar a resolver y escalar los problemas que puedan surgir en la ejecución del Servicio.
- Organizar cualquier reunión pertinente a la ejecución del Servicio.
- Garantizar acceso a sus instalaciones al personal de IQTEK en los centros dentro de los horarios establecidos.
- EL CLIENTE asignará los profesionales, con conocimientos en el área, con suficiente capacidad de acceso a los sistemas y el nivel de autorización adecuado para ejecutar las actividades requeridas en el Servicio, durante el tiempo requerido para la ejecución del Servicio.
- EL CLIENTE es responsable de mantener la confidencialidad sobre las metodologías utilizadas por IQTEK en la prestación de los Servicios.
- EL CLIENTE es responsable de identificar e interpretar cualquier ley local, regulación y/o estatuto que asegure que los productos descritos en el presente documento cumplan con los requerimientos de seguridad.

Son Responsabilidades de IQtek

IQtek designará un Gerente de Proyecto cuyo propósito es establecer los esquemas de comunicación del proyecto, así como definir los reportes, procedimientos y actividades contractuales involucradas en la prestación del servicio. El Representante IQtek tendrá la responsabilidad de atender, administrar y dirigir técnicamente, en representación de IQtek, los requerimientos de EL CLIENTE realizados bajo esta Propuesta de Servicios y coordinar las actividades a realizar, en conjunto con el Representante de EL CLIENTE y deberá:

- Revisar el alcance del trabajo y las responsabilidades de cada Parte con el Representante de EL CLIENTE. Preparar y revisar el plan de trabajo con el representante de EL CLIENTE.



- Coordinar el establecimiento del ambiente del proyecto en conjunto con el representante de EL CLIENTE.
- Ejecutar, en conjunto con el representante de EL CLIENTE, el Procedimiento de Control de Cambio del Proyecto según se requiera.
- Administrar y hacer seguimiento al plan de trabajo, en conjunto con el representante EL CLIENTE.
- Coordinar los lineamientos técnicos y metodológicos para la ejecución del Servicio.
- En caso de actividades planificadas con anticipación o que sean ejecutadas en horas laborales de EL CLIENTE, IQtek deberá solicitar a EL CLIENTE la autorización para que el personal de IQtek ejecute las actividades correspondientes en el equipo.
- Dirigir las reuniones de revisión del Servicio, en conjunto con el representante de EL CLIENTE.
- Proveer el personal técnico especializado que realizará las actividades requeridas por EL CLIENTE.
- Corroborar el cumplimiento de lo establecido en el documento Scope of Works.
- Mantener en buen estado las instalaciones de oficina y los equipos suministrados por EL CLIENTE.
- Reportar los problemas encontrados en la instalación de los equipos al personal de EL CLIENTE.
- Suministrar la documentación necesaria para la declaración de culminación de las diferentes actividades. Mantener la confidencialidad de la información suministrada por EL CLIENTE para la ejecución de los Servicios incluidos en esta Propuesta de Servicios.
- Cualquier otra actividad a cargo de IQtek descrita en el presente documento.



Forma de Pago

Los términos de pago serán:

- Un anticipo de 20% del valor del contrato.
- Un pago final de 80% restante del monto total de la oferta posterior a la implementación y puesta en marcha.

Validez de la oferta

Nuestra oferta permanecerá vigente por un tiempo de sesenta (120) días hábiles.

Tiempos de Entrega

Nos comprometemos a unas entregas de suministros e instalación de 8 a 10 semanas a partir de la firma de contrato.

Tiempos de Garantía

Garantías de 1 años siempre que cuente con respaldo de servicios por personal certificado.

Franklyn Geovanny Ciprian Goodin, en Calidad de Representante Legal, debidamente autorizado para actuar en nombre y representante de IQtek Solutions, S.R.L



Firma





Contactos

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IQTEK SOLUTIONS



Features

- 127 addresses available on this analog addressable system
- Additional system capacity achieved via multi-point SLC modules
- 99 software zones
- NFPA 72 Compliant Smoke Sensitivity Test Built-In
- System Operates as Class A or Class B for SLC, P-Link and NACs
- 5 Amp Power Supply, Expandable to 310 amps
- 2 NACS, Regulated, Rated at 3 Amps each, expandable to 188
- 2 Input/Output (I/O) Circuits for system flexibility rated at 1 Amp each, ideal for manual release and abort
- Strobe Synchronization and System Wide Sync for Potter/AMSECO®, Gentex®, Cooper Wheelock® and System Sensor® strobes
- Dedicated Alarm, Supervisory and Trouble Relays
- 4,000 Event History Buffer
- Cabinet will house up to 18 AH batteries
- Optional two line DACT with UD-2000 that can report General, Zone or Point Information
- Built in IP Communicator
- Ethernet Port for Programming and Network Connectivity
- E-Mail System Status, Reports and Event Information
- Product includes 5 year warranty
- UUKL Listed for Smoke Control



NYC Fire Dept.
Certificate of Approval
6266



Description

The IPA-100 is an analog/addressable releasing fire alarm system with a total system capacity of 127 addresses. Additional capacity on the system is achieved using multi-point SLC modules. The control panel utilizes the exclusive Potter protocol that includes a complete line of sensors and modules. Each SLC may be comprised of any combination of smoke sensor, heat detectors or modules and allows for a total of 50 ohms of impedance and may use any wire compliant with the National Electrical Code (NEC).

The IPA-100 has a 5 Amp power supply with two Notification Appliance Circuits (NACs) and two Input/Output (I/O) circuits. The NACs are rated at 3 Amps each and the I/Os are rated at 1 Amp each. Each output is regulated and power limited. In addition, each output is uniquely programmable and may be configured for steady signal, strobe synchronization, constant power, door holder power, or releasing. The strobe synchronization includes Potter/AMSECO, Gentex, System Sensor and Cooper/Wheelock and with the exclusive Quadrasync each output may have a unique brand and all strobes will flash together. The I/Os are designed for inputs such as manual release stations and abort switches that will not require polling and react nearly instantaneously.

The IPA-100 is listed for releasing of fire suppression systems. The software allows cross zones, counting zones, and timers for suppression. The system is capable of multiple release outputs across multiple hazards. In addition, the PSN-1000 may be used to extend releasing capability. The NACs may be expanded using the PSN-1000 series intelligent power supplies. Each PSN-1000 adds another 10 Amps of power, 2 additional input circuits and the IPA-100 will support up to 31 power supplies. The system will synchronize the strobes system wide. In addition, the PSN-1000E has space to allow the installation of up to six loop expansion cards. The cards mount on a stacker bracket that allows access to all SLC circuit connections.

Technical Specifications

Dimensions	16"W x 17"H x 3 7/8"D
AC Mains	3.0 Amps @ 120 VAC 50/60 HZ 2.0 Amps @ 240 VAC 50/60 HZ
Enclosure	16 gauge cold rolled steel with removable locked door with Lexan viewing window
Battery	Standby Current-130 mA Alarm Current-200 mA <ul style="list-style-type: none"> • 5 Amps power for NACs, I/O, and P-Link • 3 Amps per NAC, regulated • 1 Amp per I/O circuit, regulated • Battery Charger range 8-55 Ah • Battery Charger voltage 27.3 VDC • P-Link maximum current of 1 Amp
Temperature and Humidity Range	32° to 120° (0°C to 49°C) with a maximum humidity of 93% non-condensing.
Standards	<ul style="list-style-type: none"> • NFPA 12, 12A, 13, 15, 16, 17, 17A, 70, 72, 92, 750, and 2001 • ANSI/UL 864 - Local (L), Remote Station (RS), Central Station (CS), Propriety (PPU), Auxiliary (AUX). Type of Service: Automatic (A), Manual (M), Water flow (WF) Sprinkler Supervisory (SS) Type of Signaling: Digital Alarm Communicator (DAC), March Time (March), Non Coded (NC), Reverse Polarity (Rev Pol), Other Technologies (OT) • IBC (International Building Code)



SLC Loop Accessories

The control panel may be connected with up to 127 addressable devices or modules in any combination. The SLC is not restricted by any special wire requirements and may be wired with any wire that complies with the NEC.

SLC Loop Devices

Device	Description
PAD200-PD	Analog Photoelectric Smoke Detector is a smoke detector with a listed obscuration of 1.0 to 3.7%/foot. UL 268 7th Edition.
PAD200-PHD	Combination Analog Photoelectric Smoke/Heat Detector – a smoke detector with a listed obscuration of 1.0 to 3.5%/foot obscuration and a fixed temperature range of 135° F to 185° F heat detector. Smoke detection compliant with UL 268 7th Edition.
PAD200-PCD	Combination Photoelectric Smoke/Carbon Monoxide Detector. Smoke detection compliant with UL 268 7th Edition. Carbon Monoxide detection compliant with UL 2075.
PAD200-PCHD	Combination Photoelectric Smoke/Heat/Carbon Monoxide Detector. Smoke detection compliant with UL 268 7th Edition. Heat detection with a fixed temperature range of 135° to 185° F and is UL 268 and UL 521 7th Edition compliant. Carbon Monoxide detection compliant with UL 2075.
PAD100-HD	Analog Fixed Temperature (135° - 185°F) or Rate-of-Rise Heat Detector (software selectable).
PAD200-DUCTR	Addressable Duct Smoke Detector with Form C Relay rate at 10Amps @ 250/120VAC or 8 Amps at 30VDC.
PAD200-DUCT	Addressable Duct Smoke Detector.
PAD100-6B	6" round base that is mounted to an electrical box and wired for connection of one of the above sensors.
PAD100-4B	4" round base that may be mounted to an electrical box and wired for connection to the above sensors.
PAD100-IB	Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop.
PAD100-RB	Addressable Relay Base that contains one relay controlled by the SLC. Relay is rated at rated at 2 amps at 30 VDC or 0.5A at 125VAC.
PAD100-SB	Addressable Sounder Base that contains an addressable sounder module that may be configured for local, group and all call.
PAD100-CD	Addressable CO gas detector.
PAD100-DD	Addressable photoelectric smoke detector for use in DUCT/DUCTR enclosure.
PAD100-LFSB	Addressable Low Frequency Sounder Base that contains an addressable sounder module that may be configured for local, group and all call. The LFSB complies with the Low Frequency Signal Requirements (520 Hz)
PAD100-SPKB	Speaker base is a wall or ceiling mount speaker capable of 25 or 70.7 VRMS and is field selectable from 1/8W to 4W.



Modules

Device	Description
PAD100-MIM	Micro Input Module provides a small foot print contact module for mounting inside an enclosure.
PAD100-PSSA	Single Action Addressable Pull Station.
PAD100-PSDA	Dual Action Addressable Pull Station.
PAD100-SIM	Single Input Module is a standard contact module with an LED that mounts into a 4" square electrical box.
PAD100-DIM	Dual Input Module is a device that can monitor two distinct inputs with a single device or in a Class A mode.
PAD100-TRTI	Two Relay Two Input module provides two form C relays that are individually controlled by the control panel. Each relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC. Also provides two contact inputs.
PAD100-NAC	Notification Appliance Circuit module is an addressable remote appliance circuit controlled by the panel.
PAD100-ZM	Zone Module is used to connect conventional 2-wire smoke detectors to the system.
PAD100-IM	Isolater Module interrupts a short on the SLC and prevents the short from affecting protected devices on the loop.
PAD100-RM	Relay Module that provides one form C relay controlled by the control panel. Relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC.
PAD100-LED	Module provides a single addressable LED that is controlled by the control panel.
PAD100-SM	Speaker Module provides switching for two audio channels.
PAD100-LEDK	Addressable LED and key switch that mounts in a single gang box.
PAD100-DRTS	DUCTR Remote Test Switch that mounts in a single gang box and optionally supervised.
PAD100-OROI	One Relay One Input Module provides one form C relay and one input. The relay is rated at 2 amps at 30VDC or 0.5 amps at 125VAC.



SLC Features

The Potter protocol is a digital protocol with a proven design for reliability and noise immunity. The system does not require special cable or conductors for connection of the Signaling Line Circuit as long as the cable is compliant with NFPA 70 and NFPA 72. The system allows for Class A or Class B installations as well as “T-Taps”, with a max wiring distance of 10,000 Ft.

Sensor Features

The sensors through the fire alarm control panel provide a real time status as to the condition of the system. The smoke detector sensitivity, heat detector temperature level and drift compensation are all programmable options. The system also allows for a day/night mode where the panel automatically adjusts the sensitivity depending on the time of day. To assist in the reduction of false alarms, the smoke detectors also have a maintenance warning that sends a trouble signal when a detector is dirty to the point that it can no longer maintain the programmed sensitivity.

User Interface

The fire alarm control panel has a 2 x 16 LCD display to provide information to the system status. The keypad has navigation keys to allow manipulation of the Menu on board the panel. The panel is shipped standard with the following LEDs:

- AC Power - Green
- Alarm - Red
- Earth Fault - Amber
- Supervisory - Amber
- Silenced - Amber
- Trouble - Amber
- Pre-Release - Amber
- Release - Red

The common buttons include a Silence, Reset, Acknowledge, and Drill. All of the buttons are accessible once the locked door is opened.

P-Link

The IPA-100 has a proprietary communication protocol that communicates through a RS-485 connection to field devices. Up to 64 devices may be connected to a single P-Link connection. The P-Link includes the communication terminals and regulated 24 VDC connection for the field devices. The field devices may be any of the following:

RA-6075R – 2 x 16 LCD annunciator with a key pad in a locked metal enclosure.

RA-6500R(F) – 4 x 40 LCD annunciator with a key pad in a locked metal enclosure. Flush mount version available.

LED-16(F) – 16 LED annunciator with common indicators in a locked metal enclosure. Flush mount version available.

PSN-1000(E) – 10 amp, remote intelligent power supply with 6 NACs, 2 Inputs and a P-Link repeater. This panel is listed in conjunction with the IPA-100 as releasing circuits.

CA-6075 – Class A convertor that converts the SLC, NACs and P-Link connection

UD-2000 – UL listed, Dual line telephone alarm communicator

DRV-50 – LED driver expander, used to connect up to 50 LEDs in a graphic display

FCB-1000 – Fire communication bridge, provides remote mounting of the Ethernet connection

FIB-1000 – Fiber interface module, used to extend P-Link to multi-mode fiber (2 required)

RLY-5 – Relay module, provides 5 form C relay contacts rated at 3.0 amps 24VDC/125AC

SPG-1000 – Serial parallel gateway, allows for the connection to a serial or parallel printer

The **FIB-1000**, **FCB-1000** and the **SPG-1000** may be installed in the stacker bracket or ordered with the optional rack mount enclosure.

MC-1000 Multi-Connect allows up to sixty-three IPA series panels to share a single reporting technology.

IDC-6 – Initiating device circuit provides 6 programmable inputs

AE-2 – Two card expansion cabinet

AE-8 – Eight card expansion cabinet

AE-14 – Fourteen card expansion cabinet

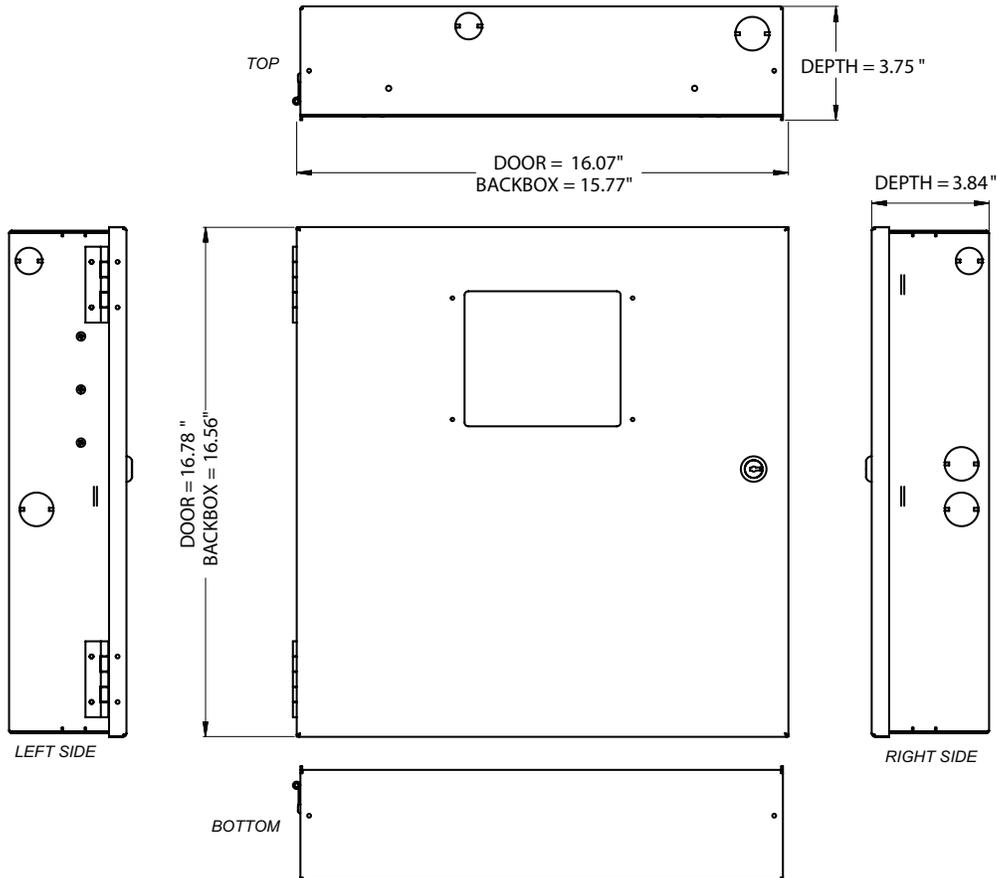
Ethernet/I.P. Connection

The IPA-100 is shipped standard with an Ethernet connection. This connection is the programming port and may be connected to a building Wide Area Network (WAN) or Local Area Network (LAN). Once connected to the Internet, the panel may be selectively programmed to e-mail alarm conditions, trouble conditions, supervisory conditions, test, Event History and detector status. An e-mail may be sent to the panel and the panel will e-mail the event history, detector status, configuration file or server status to an authorized E-mail account. In addition, reminders may be set to send an e-mail for service, testing or other conditions.

In addition, the Ethernet connection is UL listed as an IP communicator. The IP communicator is listed to report to the UL listed Sur-Gard III IP receiver. The IP communicator replaces the traditional less reliable alarm communicator transmitter that utilized telephone lines. The IP communicator is an active method of connection and communication to the monitoring station.



Dimensions



DWG #593-1

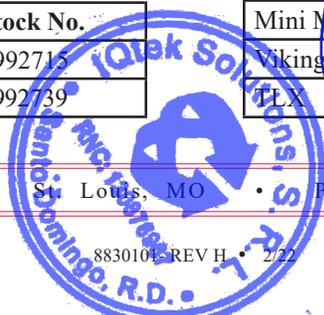
Compatible Releasing Devices

Note: For releasing applications please order the Potter EOLD (3005012) for circuits connected to a releasing solenoid or actuator.

Brand	Description
Skinner	73218BN4UNLVN0C112CZ 73212BN4TNLVN0C322C2
Victaulic	753-E Series
Mini Max	MX123 & MX200 w/ 8876677 & 889323
Viking	11591, 11601, 11602, 13843, & 13844
TLX	PA0036

Ordering Information

Model	Description	Stock No.
IPA-100	Fire Alarm Releasing Control Panel	3992715
	Replacement Board IPA-100	3992739

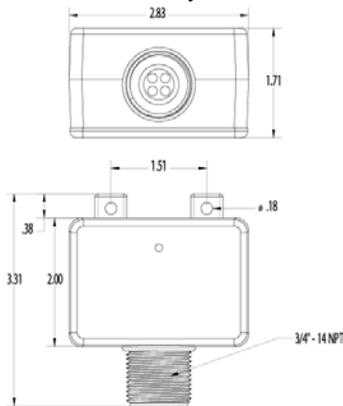


DITEK's HW series of surge protectors are designed and manufactured to meet the exacting standards of the life safety industry. These compact parallel mount surge protectors are widely used to protect fire alarm panels and other dedicated branch circuit loads.

DTK-120HW DTK-120/240HW

Product Features

- Available for Popular 120V and 120/240V systems
- DTK-120HW approved for 20A circuit breakers
- Diagnostic LED indicates ground presence, system power and SPD function
- Weatherproof enclosure
- Small footprint enables installation in a variety of locations
- Available for popular 120V, and 120/240V systems
- Complies with ANSI/IEEE C62.41 and C62.45 Category B standards
- Ten Year Limited Warranty



Specifications

Agency Approvals: UL 1449, 3rd Edition, cUL

IEEE Location Category: Category B

Protector Type: SPD Type 2

Protection Modes: L-G, L-N, N-G

Response Time: <1ns

Temperature Range: -40°F – 185°F (-40°C – 85°C)

Maximum Humidity: 95% non-condensing

Operating Frequency: 0Hz – 400Hz

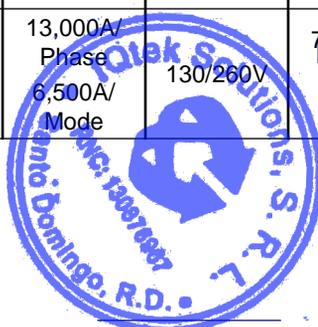
Dimensions: 2.93" x 2.83" x 1.68"
(74.4mm x 71.9mm x 42.7mm)

Connection: 3/4" diameter threaded fitting

Weight: .5lb. (227g)

Housing: ABS

Model Selection: DTK-	Service Wiring	Peak Surge Current	MCOV	UL 1449, 3 rd Ed. V.P.R.	Short Circuit Current Rating	UL1449, 3 rd Ed. I _n Rating
120HW	Single Φ (2W + G), 120VAC	19,500A	130V	700V L-N, L-G; 600V N-G	10,000A	3,000A
120/240HW	Split Φ (3W + G), 120/240VAC	13,000A/ Phase 6,500A/ Mode	130/260V	700V L-N, L-G; 600V N-G; 1200V L-L	10,000A	3,000A



Features

- UL 268 7th Edition
- Low profile, less than 2 inches with the base
- Wide selectable sensitivity range of 1.0 to 3.7%/foot
- Sensor communicates sensitivity to control panel
- UL listed smoke calibration and sensitivity
- Optional locking tab to prevent unwanted removal
- Simple DIP switch address setting, no programming tool required
- LED alarm indicator
- Product includes a 5 year warranty
- UUKL Listed for Smoke Control



Description

The Photoelectric Smoke Sensor is a listed Analog Addressable smoke sensor compatible with fire alarm control panels that utilize the Potter Addressable Device (PAD) protocol. The PAD200-PD is a low profile smoke sensor with a wide sensitivity range. The sensor and base (not included) are made of a durable plastic in an off-white color to blend in with the ceiling.

The PAD200-PD has a sensitivity range of 1.0 to 3.7 % per foot and is UL. The PAD200-PD features drift compensation and has built in dirty detector warning as well as. The PAD200-PD and the control panel communicate over a proven and robust digital communication path and the system analyzes the information at the particular device. The total polling speed is less than five (5) seconds, well under the UL requirements.

The sensor is compatible with any of the PAD series sensor bases and simply twists on. The PAD200-PD is addressed using DIP switches in the rear of the sensor and can be easily programmed in the field without special tools.

Setting the Address

Each addressable device on the SLC loop must have a unique address from 1 to 127 to function properly. The address is set using DIP switches.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to SLC or device. Verify the following:

1. Power to the device is removed
2. Field wiring is correctly installed.
3. Field wiring has no open or short circuits.

Technical Specifications

Operating Voltage	24 VDC
Detector Current Draw	300 µA
Alarm indicator	1 LED
Alarm set-point range	1.0 to 3.7 %/ft 3.6-12 %/m
Installation temperature range	32 to 120 ° F / 0 to 49 ° C
Operating relative humidity range	0% to 93% (Non-condensing)
Start-up time	Max. 1 sec.
Maximum number of addresses per loop	127
Maximum number of lighted indicators in alarm per loop.	30
Color	Eggshell White
Weight (without base)	101g (3.56oz)
Dimensions (without base)	Height: 1.35 in (34mm) Diameter: 3.93 in (100 mm)



Air Velocity Ratings

The PAD200-PD has an Open Area of Protection air velocity rating of 0 to 300 feet per minute.

The system has a maximum of 30 LEDs that can be turned on simultaneously. If the system already has 30 LEDs on, the PAD200-PD will operate even though the LED may not illuminate.

Operation

The PAD200-PD is an analog addressable sensor that uses one address on the Signaling Line Circuit (SLC) of a compatible fire alarm control panel. The unit communicates with the control panel as it is polled. The LEDs flash every time the unit is polled and they will flash at a fast rate if the unit is in an active status. The polling LED can be turned off if desired for less conspicuous operation.

The PAD200-PD with the PAD100-4DB or PAD100-6DB has a low profile of less than two (2) inches to blend into the surrounding environment. The sensor includes an insect screen to prevent foreign objects from reaching the chamber and the can be cleaned to restore operation of a dirty detector.

Sensor Sensitivity

The PAD200-PD and the compatible control panel work in tandem to keep the sensitivity consistent. As the sensor is installed over time, the sensor compensates for the dirt in the unit until it is out of range. At that time, the panel will indicate a dirty sensor. The sensor will then have to be cleaned or replaced.

The PAD200-PD can be programmed to provide a maintenance alert prior to reaching the dirty sensor level which will allow for intervention prior to the sensor going into trouble. This allows for sensor replacement or cleaning prior to a nuisance trouble occurs.

NOTE: As required by NFPA, do not install the sensors until all construction is complete and the work area has been thoroughly cleaned. If the sensors have been installed in a construction environment, they should be cleaned or replaced before the system is placed into service.

Spacing

The PAD200-PD is UL listed with a recommended maximum spacing of 30 feet. Refer to NFPA 72 for specific information regarding detector spacing, placement and special applications.

Compatible Bases

All bases will mount on a single gang, double gang, octagon, 4" square or mud ring electrical box.

Device	Description	Stock No.
PAD100-4DB	4" Standard Base	3992731
PAD100-6DB	6" Standard Base	3992732
PAD100-IB	6" base with an isolator module included.	3992730
PAD100-RB	6" base with one Form-C relay contact. 2A @ 30VDC, 0.5A @ 125VAC	3992728
PAD100-SB	6" base with sounder module included. Sound pattern is provided from external source.	3992729
PAD100-SPKB	6" base with speaker included	3992762

Ordering Information

Model	Description	Stock No.
PAD200-PD	Photoelectric Smoke Sensor	3992770



Features

- Terminals Marked with Polarity to assist with installation
- Duplicate terminals for in and out SLC wiring
- Terminals accept 22 to 12 AWG wire sizes
- Installs on single gang, double gang, octagon or 4" square box
- Locking tab prevents unauthorized detector removal
- Product includes 5 year warranty



Application

The Potter PAD100-6DB and PAD100-4DB detector bases are used to install Potter's addressable smoke and heat detectors. The PAD100-6DB will mount on a single gang, double gang, octagon or 4" square electrical box.

Description

The PAD100-6DB and PAD100-4DB are low-profile, surface mount bases used with Potter's addressable detectors. The base uses screw-clamp terminals that accept wire ranging from 22 to 14 AWG. When installed on recessed electrical boxes the PAD100-6DB is wide enough to completely cover the back box and the immediate surrounding area. The base is equipped with a locking tab to deter unauthorized removal of the attached detector.

Technical Specifications

Mounting Options	Single gang, double gang, octagon, and 4" square box
Terminals	Screw-Clamp Type
Wire Gauge	22 to 12 AWG
Dimensions	Diameter: 6.3 in (166 mm) Height 0.72 in (18 mm)
Shipping Weight	87g (3.07 oz)
Material	Durable Plastic

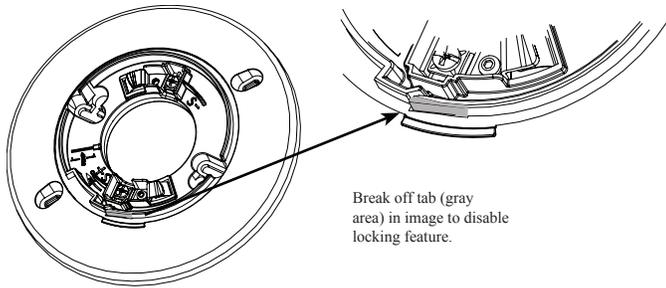


Locking Feature

The PAD100-6DB and PAD100-4DB include a locking feature that prevents removal of the detector without using a tool.

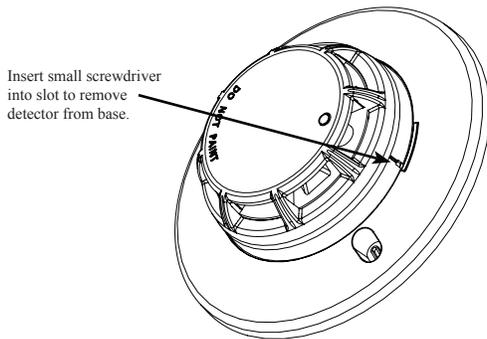
1. To eliminate this feature, break off the locking tab (refer to Figure 1), and then install the detector.

Fig. 1



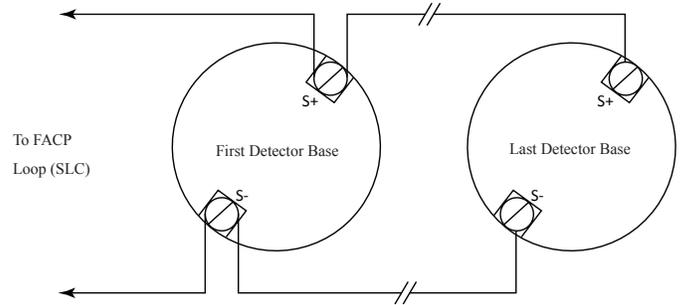
2. To remove the detector from the base when the locking feature has been enabled, insert a small screw driver into the slot on the base to push the plastic tab while simultaneously turning the detector head counter-clockwise.

Fig. 2



Wiring Diagram

Fig. 3



Ordering Information

Model	Description	Stock No.
PAD100-6DB	6" Sensor Base	3992732
PAD100-4DB	4" Sensor Base	3992731





- UL and cUL Listed, CSFM Listed, MEA Approved, ADA Compliant
- Single or dual action
- Terminal connectors
- 10 Amp snap action switch
- Gold plated SPST contacts
- Optional auxiliary contacts
- Mounts on standard single gang box
- Surface backboxes available
- Multiple colors and custom text available
- Glass break rod
- Made in the U.S.A.

Description

The Potter Special Application Pull Station Series offers a complete line of die-cast pull stations for a variety of applications with various colors and descriptions. The pull stations are available in single or dual action models, weather proof, explosion proof and multiple contact configurations. All of the pull stations have a 10-amp snap action switch and a dedicated terminal block for the ease of wire connections. All of the metal is completely coated to inhibit corrosion and provide for a uniform and quality finish.

The pull stations are available in red, blue, green, yellow, white, black, gray, purple or orange. The wording on the pull stations is customizable with a large variety of standardized units. The standard models have a hex key reset, however a key reset is also available. An institutional model is available that is operated with a key only. The models are available with shallow and deep surface mount back boxes.

The weather proof and explosion proof models include the appropriate back box with the pull station. The explosion proof is also inherently weather proof.

Operation

The Potter single action series of pull stations operate by pulling the white operating handle straight down and the handle will lock into place. The dual action stations require the lifting of the front cover and then pulling the white operating handle straight down. The stations are reset by opening the front and placing the handle in the normal position.

Engineering Specifications

The installer shall furnish and install the Potter Special Application Series of pull stations as indicated. The pull station shall be die cast construction with a "T" type pull handle that is ADA compliant. Single action pull stations shall be a RMS-1T. Dual action pull stations shall be the Potter RMS-1T-LP. Any units in an outdoor or wet location shall be an RMS-1T-WP. Explosion proof environments for Class 1 Groups B, C and D or Class 2 Groups E, F or G shall use the RMS-6T-EXP-WP. The contacts shall be a single pole, single throw switch rated at 1 amp 30 VDC/125 VAC. The device shall have a terminal block for ease of wiring. Once activated, the pull station shall be reset by opening the front cover. Opening of the cover in a normal state shall initiate an alarm.

Specifications

Switch Rating: 1 Amp @ 30 VDC
1 Amp @ 125 VAC
Pull Station Dimensions: 4 3/4" H x 3 1/4" W x 7/8" D

For fire alarm pull stations see bulletin #8900097.



Ordering Information

Contact Type	Model
Single	RMS-1T
Dual	RMS-2T
Dual Form C	RMS-6T

Options (add behind model)	Select Color	Provide Wording (any language)
-LP Dual Action	Black, blue, green, grey, orange, purple, red, white, or yellow	Wording can be limited on the standard model. The -LP offers three lines of text. Screen charges may apply for custom wording. Contact customer service for details.
-WP Weather Proof		
-LP-WP Dual Action Weather Proof	Brass or chrome plated	
-EXP Explosion Proof		

Example:

A single contact, dual action, weather proof green pull station for “ACCESS CONTROL” would be ordered as follows: RMS-1T-LP-WP Green “ACCESS CONTROL”

*Explosion proof are listed for Class I-III Groups B-G and are weather and corrosion resistant.

Stock Number	Color	Model Number	Contact Type	Wording
1000600	Blue	RMS-1T Blue	SPST	DOOR RELEASE
1000609		RMS-1T Blue	SPST	EVACUATION
1000618		RMS-1T Blue	SPST	MEDICAL
1000619		RMS-1T Blue	SPST	RELEASING
1000614		RMS-1T-LP Blue	SPST, Dual Action	EMERGENCY EXIT
1000654		RMS-1T-LP Blue	SPDT, Dual Action	EMERGENCY SHUT OFF
1000630		RMS-6T-EXP Blue	DPDT, Explosion Proof	MAN DOWN
1000617		Red	RMS-1T Red	SPST
1000627	RMS-1T-WP-LP Red		SPST, Dual Action Weather Proof	AGENT RELEASE
1000655	RMS-1T-LP Red		SPST, Dual Action	FIRE SUPPRESSION RELEASE
1000653	RMS-1T-LP Red		SPST, Dual Action	FM200 RELEASE
1000651	Yellow	RMS-1T-LP Yellow	SPST, Dual Action	AGENT RELEASE
1000623		RMS-1T-LP-WP Yellow	SPST, Dual Action Weather Proof	DELUGE SPK RELEASE
1000636		RMS-6T-EXP Yellow	DPDT, Explosion Proof	EMERGENCY
1000611		RMS-1T Yellow	SPST	FIRE SUPPRESSION SYSTEM
1000615		RMS-1T-LP Yellow	SPST, Dual Action	FOAM SYSTEM RELEASE
1000624		RMS-1T-LP-WP Yellow	SPST, Dual Action Weather Proof	FOAM RELEASE
1000637		RMS-6T-EXP-LP Yellow	DPDT, Dual Action Explosion Proof	FOAM RELEASE
1000603		RMS-1T Yellow	SPST	GAS
1000682		RMS-1T-WP Yellow	SPST, Weather Proof	HAZ MAT
1000620		RMS-1T-WP Yellow	SPST, Weather Proof	PREACTION RELEASE



Features

- Single module with dual contact monitoring inputs
- Two (2) Class B or one (1) Class A monitoring inputs
- SLC Class A, Class X & Class B
- Mounts in a standard 4" or double gang box
- Wiring terminals accessible when mounted in box
- All wiring terminals accept 22 to 12 AWG
- Product includes a 5 year warranty
- UUKL Listed for Smoke Control

NOTE: This addressable module does not support 2-wire smoke detectors.



Description

The PAD100-DIM uses one (1) SLC loop address when monitoring two (2) Class B circuits or one (1) Class A circuit. The module mounts on either a 4" square or double gang box. The module is capable of monitoring two (2) separate class B circuits making it ideal for monitoring sprinkler waterflow and valve tamper switches when they are located in the same proximity. The PAD100-DIM includes one red LED to indicate the module's status. In normal condition, the LED flashes when the device is being polled by the control panel. When an input is activated, the LED will flash at a fast rate.

Application

The PAD100-DIM is compatible with Potter's IPA and AFC/ARC series addressable fire alarm control panels. The PAD100-DIM is an interface module used to monitor dry contact devices such as sprinkler waterflow, valve tamper switches, or conventional pull stations. The module is capable of monitoring two separate Class B or one Class A circuits.

Setting the Address

Each addressable SLC device must be assigned an address. The address is set using the DIP switch located on the PAD100-DIM. When the PAD100-DIM is used to monitor two individual Class B circuits a single device address is assigned, each input is then identified as a sub-point of the module address. For example, if the address number is assigned as "8", the first input will be "8.1" and the second input will be "8.2".

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to the panel or device:

1. Power to the device is removed.
2. Field wiring is correctly installed.
3. Field wiring has no open or short circuits.

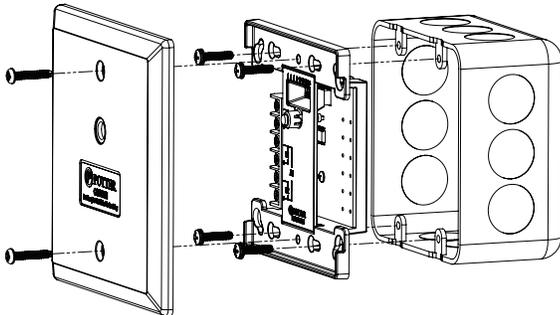
Technical Specifications

Operating Voltage	24.0V
Max SLC Standby Current	240 μ A
Max SLC Alarm Current	240 μ A
Max Wiring Resistance of IDC	100 Ω
Max Wiring Capacitance of IDC	1 μ F
EOL Resistor	5.1K Ω
Operating Temperature Range	32 to 120°F (0 to 49°C)
Operating Humidity Range	0 to 93% (non-condensing)
Max no. of Module Per Loop	127 units
Dimensions	4.17" (106mm)L \times 4.17" (106mm)W \times 1.14" (29mm)D
Mounting Options	Standard 4" Square or Double Gang Box
Shipping Weight	0.6 lbs



Installation Using Compatible Electrical Box

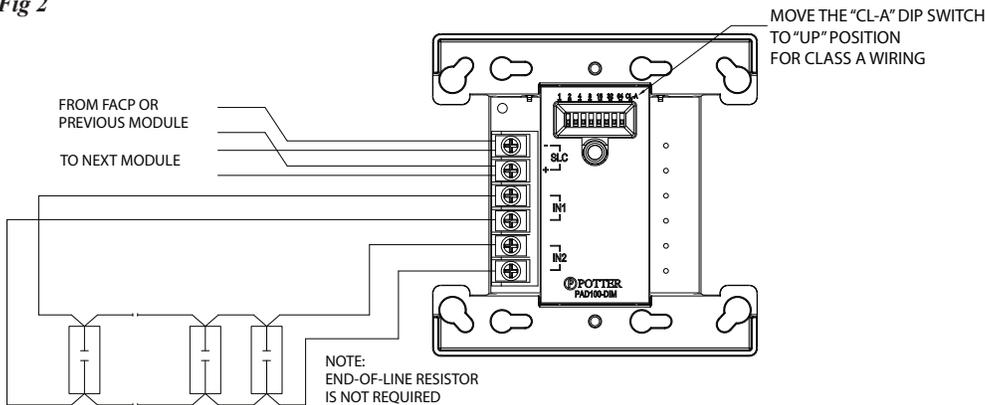
Fig 1



Wiring Diagrams

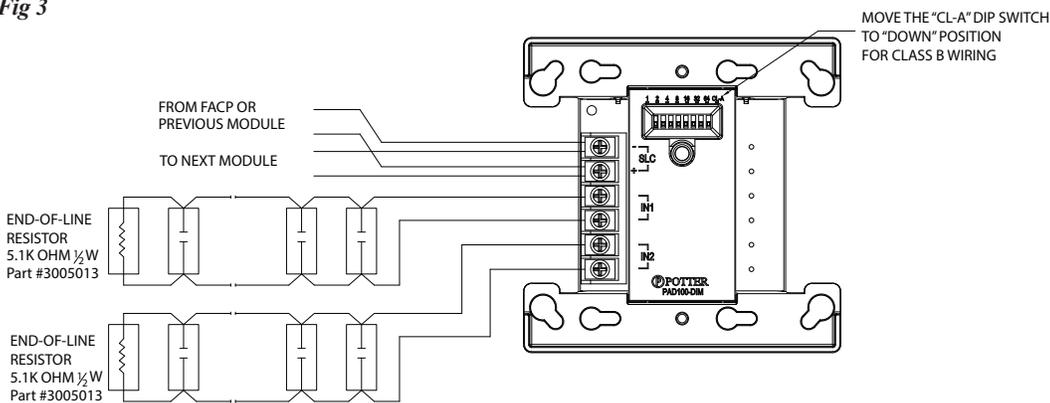
PAD100-DIM With One Class A Circuit

Fig 2



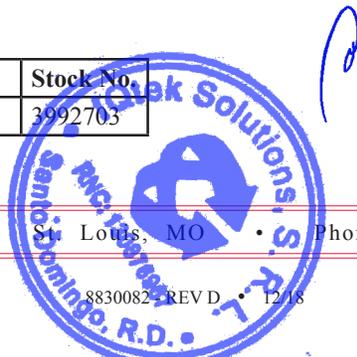
PAD100-DIM With Two Class B Circuits

Fig 3



Ordering Information

Model	Description	Stock No.
PAD100-DIM	Dual Input Module	3992703



Features

- Monitored output module that provides an additional supervised output
- Can be used as either a NAC or Releasing Output
- NAC can be wired Class A or Class B
- Monitors presence of 24 VDC Aux Power
- SLC Class A, Class X & Class B
- Mounts in a standard 4" or double gang box
- Wiring terminals accessible when mounted in box
- All wiring terminals accept 22 to 12 AWG
- Product includes a 5 year warranty
- UUKL Listed for Smoke Control



Description

The PAD100-NAC module uses one (1) address on an SLC Loop. The module provides a programmable source of power to supervise and control one (1) Class B or Class A Notification Appliance or one (1) Class B Releasing Circuit. The module requires and supervises a 24 VDC auxiliary power connection. The PAD100-NAC includes one red LED to indicate the module's status. In normal condition, the LED flashes when the device is being polled by the control panel.

Application

The PAD100-NAC is compatible with Potter's IPA and AFC/ARC series addressable fire alarm control panels. The PAD100-NAC is a monitored Notification Appliance Circuit that wires to the SLC loop to provide an additional notification circuit. When used with a Potter addressable releasing panel, the PAD100-NAC can provide an additional releasing circuit.

Setting the Address

Each addressable SLC device must be assigned an address. The address is set using the DIP switches on the PAD100-NAC module.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to the panel or device:

1. Power to the device is removed.
2. Field wiring is correctly installed.
3. Field wiring has no open or short circuits.

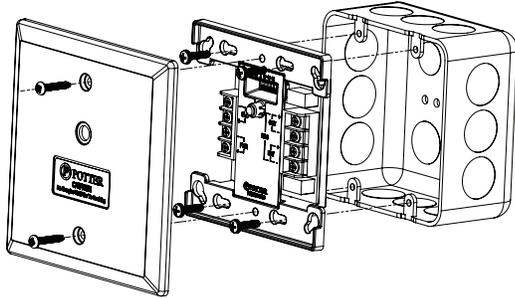
Technical Specifications

Operating Voltage	24.0V
Max SLC Standby Current	200µA
Max SLC Alarm Current	200µA
Aux Power Required	16-33 VDC
Output Ratings	24 VDC, 2A
EOL Resistor	5.1K Ω
EOL Resistor Diode	Stock #3005012 Releasing Applications (Not Included)
Operating Temperature Range	32 to 120°F (0 to 49°C)
Operating Humidity Range	0 to 93% (non-condensing)
Max no. of Module Per Loop	127 units
Dimensions	4.17" (106mm)L × 4.17" (106mm)W × 1.14" (29mm)D
Mounting Options	Standard 4" Square or Double Gang Box
Shipping Weight	0.6 lbs



Installation Using Compatible Electrical Box

Fig 1

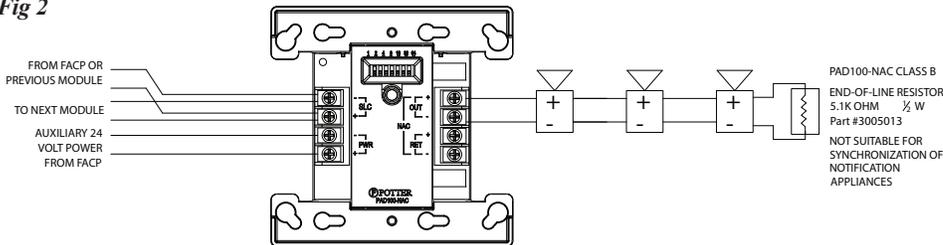


Wiring Diagrams

Output Connected to a Notification Appliance Circuit

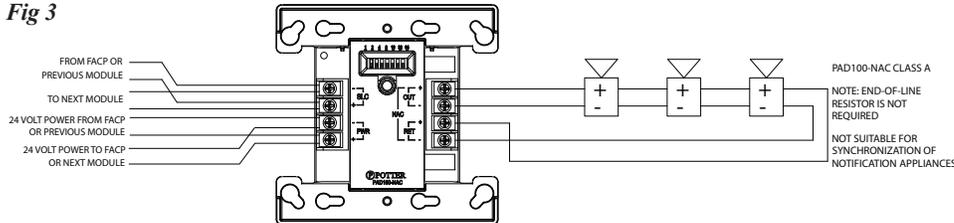
Typical Class B Wiring Diagram

Fig 2



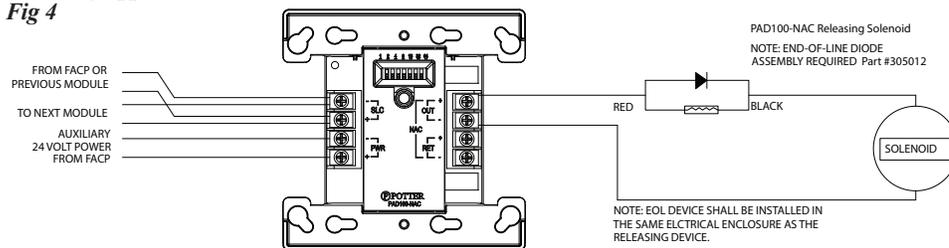
Typical Class A Wiring Diagram

Fig 3



Releasing Application

Fig 4



NOTICE

It is possible that the internal relay in the PAD100-NAC may be shipped in the non-normal / activated state. To ensure that the internal relay is set to the normal state, connect the module to the SLC loop and reset the control panel before terminating the wiring to the modules output.

Ordering Information

Model	Description	Stock No.
PAD100-NAC	Notification Appliance Circuit	3992707



UL, ULC, and FM Approved

Sizes Available: 6" (150mm), 8" (200mm) and 10" (250mm)

Voltages Available: 24VAC
120VAC
12VDC (10.2 to 15.6) Polarized
24VDC (20.4 to 31.2) Polarized

Service Use: Fire Alarm
General Signaling
Burglar Alarm

Environment: Indoor or outdoor use (See Note 1)
-40° to 150°F (-40° to 66°C)
(Outdoor use requires weatherproof backbox.)

Termination: AC Bells - 4 No. 18 AWG stranded wires
DC Bells - Terminal strip

Finish: Red powder coating

Optional: Model BBK-1 weatherproof backbox
Model BBX-1 deep weatherproof backbox

These vibrating type bells are designed for use as fire, burglar or general signaling devices. They have low power consumption and high decibel ratings. The unit mounts on a standard 4" (101mm) square electrical box for indoor use or on a model BBK-1 weatherproof backbox or BBX-1 deep weatherproof backbox for outdoor applications. Weatherproof backbox model BBK-1, Stock No. 1500001.

Notes:

1. Minimum dB ratings are calculated from integrated sound pressure measurements made at Underwriters Laboratories as specified in UL Standard 464. UL temperature range is -30° to 150°F (-34° to 66°C).
2. Typical dB ratings are calculated from measurements made with a conventional sound level meter and are indicative of output levels in an actual installation.
3. ULC only applies to MBA DC bells.

Size inches (mm)	Voltage	Model Number	Stock Number	Current (Max.)	Typical dB at 10 ft. (3m) (2)	Minimum dB at 10 ft. (3m) (1)
6 (150)	12VDC	MBA-6-12	1750070	.12A	85	76
8 (200)	12VDC	MBA-8-12	1750080	.12A	90	77
10 (250)	12VDC	MBA-10-12	1750060	.12A	92	78
6 (150)	24VDC	MBA-6-24	1750100	.06A	87	77
8 (200)	24VDC	MBA-8-24	1750110	.06A	91	79
10 (250)	24VDC	MBA-10-24	1750090	.06A	94	80
6 (150)	24VAC	PBA246	1806024*	.17A	91	78
8 (200)	24VAC	PBA248	1808024*	.17A	94	77
10 (250)	24VAC	PBA2410	1810024*	.17A	94	78
6 (150)	120VAC	PBA1206	1806120*	.05A	92	83
8 (200)	120VAC	PBA1208	1808120*	.05A	99	84
10 (250)	120VAC	PBA12010	1810120*	.05A	99	86

All DC bells are polarized and have built-in transient protection.

* Does not have ULC listing.

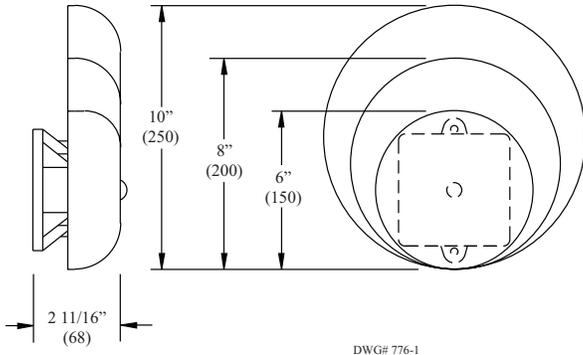
WARNING

In outdoor or wet installations, bell must be mounted with weatherproof backbox, BBK-1 or BBX-1. Standard electrical boxes will not provide a weatherproof enclosure. If the bell and/or assembly is exposed to moisture, it may fail or create an electrical hazard.



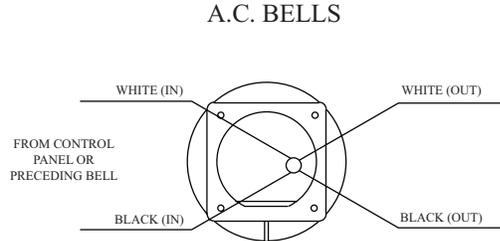
Bells Dimensions Inches (mm)

Fig. 1



Wiring (rear view)

Fig. 3



CAUTION:
WHEN ELECTRICAL SUPERVISION IS REQUIRED USE IN AND OUT LEADS AS SHOWN.

NOTES:

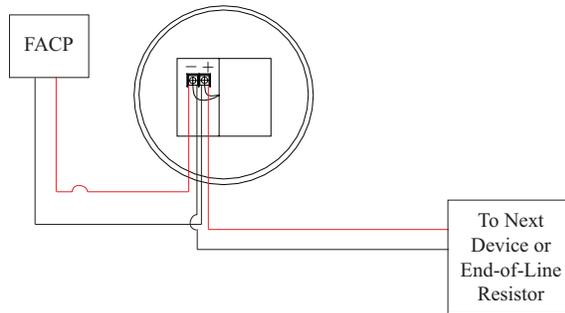
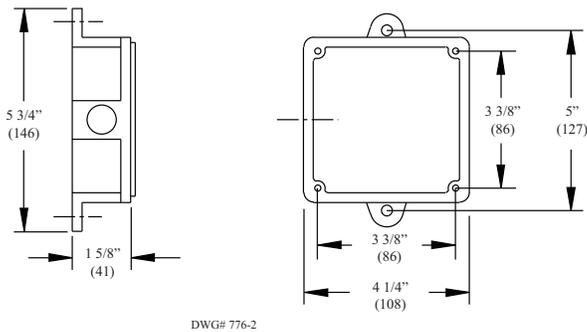
1. WHEN USING AC BELLS, TERMINATE EACH EXTRA WIRE SEPARATELY AFTER LAST BELL.
2. END-OF-LINE RESISTOR IS NOT REQUIRED ON AC BELLS.

DWG# 776-3

Weatherproof Backbox Dimensions Inches (mm)

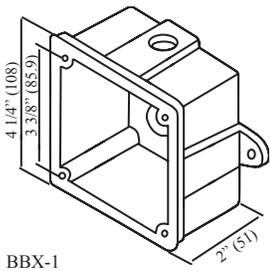
Fig. 2

Box has one threaded 1/2" conduit entrance



Installation

1. The bell shall be installed in accordance with NFPA 13, 72, or local AHJ. The top of the device shall be no less than 90" AFF and not less than 6" below the ceiling.
2. Remove the gong.
3. Connect wiring (see Fig. 3).
4. Mount bell mechanism to backbox (bell mechanism must be mounted with the striker pointing down).
5. Reinstall the gong (be sure that the gong positioning pin, in the mechanism housing, is in the hole in the gong).
6. Test all bells for proper operation and observe that they can be heard where required (bells must be heard in all areas as designated by the authority having jurisdiction).



WARNING
Failure to install striker down will prevent bell from operating.



Features

- Tamperproof field selectable candela settings of 15, 30, 60, 75, and 110
- Lens colors available in amber, blue, green, and red
- Super-Slide® Bracket – Ease of supervision testing
- Checkmate® - Instant voltage verification
- Synchronize strobe and/or horn with AVSM module
- Silence audible while visual appliance remains flashing (for use in accepted jurisdictions)
- Switch for chime, whoop, mechanical, and 2400Hz tone
- Switch for continuous or temporal 3 tone (not available on whoop)
- Tamperproof re-entrant grill
- Product includes a 5 year warranty



7135-0328:0210
7135-0328:0209

Application

The CS/CHS Series Colored Lens Signals are wall mount, low profile strobes and horn/strobes that offer dependable audible and visual signals for warning and emergency notification. Applications include emergency communication, severe weather, emergency response and many more.

Description

The CS/CHS Series Colored Lens Signals are 24VDC units available in lens colors of amber, blue, green, and red. The Series offers tamperproof field selectable options of 15, 30, 60, 75, and 110 candela. They have a minimal operating current and a minimum flash rate of 1Hz, regardless of input voltage. The strobes can be synced using a Gentex sync protocol or the AVSM Sync Module.

The Colored Lens Series is shipped with a die-cast universal 4” mounting bracket which incorporates the popular Super-Slide® feature that allows the installer to easily pre-wire the system and test for supervision. The product also features a locking mechanism that secures the signal to the bracket without showing any screws. The Colored Lens Series also features the Checkmate® - Instant Voltage Verification Feature which allows the installer to check the voltage drop, current draw, and match against the blue print.

Product Listings

- ANSI/UL 464 and 1638
- CSFM 7135-0328:0210 (CHS Series)
- CSFM 7135-0328:0209 (CS Series)

Technical Specifications

Operating Voltage	Nominal 24VDC (16-33VDC)
Environmental Limitations	32°F - 120°F (0° - 49°C) Indoor Only
Dimensions	5” H x 4.5” W x 2.5” D
Wiring Connections	Terminals accept 18 - 12 AWG
Mounting	Single gang, double gang, or 4” square backbox Surface mount with AVBB
Shipping Weight	1.05 lbs.



CS Series Colored Lens Strobe, Selectable Candela			
Model Number	Stock Number	Lens Color	Body Color
CS-24WAR	4890100	Amber	Red
CS-24WAW	4890101	Amber	Off-White
CS-24WBR	4890102	Blue	Red
CS-24WBW	4890103	Blue	Off-White
CS-24WGR	4890104	Green	Red
CS-24GW	4890105	Green	Off-White
CS-24WRR	4890106	Red	Red
CS-24WRW	4890107	Red	Off-White

Optional Bezels		
Wording	Color	Stock Number
AGENT	Red	4890262
AGENT	Off-White	4890263
ALERT	Red	4890264
ALERT	Off-White	4890265

All CS/CHS Series devices are plain (no wording).
AGENT/ALERT bezels can be ordered separately.

CHS Series Colored Lens Strobe, Selectable Candela					
Model Number	Stock Number	Lens Color	Body Color	Reverberant dBA at 10', per ANSI/UL 464	In Anechoic Room dBA at 10'
CHS-24AR	4890120	Amber	Red	62-82	100
CHS-24AW	4890121	Amber	Off-White	62-82	100
CHS-24BR	4890122	Blue	Red	62-82	100
CHS-24BW	4890123	Blue	Off-White	62-82	100
CHS-24GR	4890124	Green	Red	62-82	100
CHS-24GW	4890125	Green	Off-White	62-82	100
CHS-24RR	4890126	Red	Red	62-82	100
CHS-24RW	4890127	Red	Off-White	62-82	100

UL Max Strobe Current Ratings (24VDC Regulated)		
Candela	Amber Lens	Blue, Green, and Red Lens
15cd	47mA	105mA
30cd	64mA	130mA
60cd	113mA	203mA
75cd	145mA	243mA
110cd	178mA	310mA

For unfiltered FWR ratings, see installation manual.

Horn Decibel and Current Ratings			
Horn Setting	Minimum dBA at 10', Per UL 464 (HIGH)	Minimum dBA at 10', Per UL 464 (LOW)	Regulated 24VDC Max. Operating Current, at High Setting (mA)
Temporal 3 2400Hz	78	71*	28
Temporal 3 Mechanical	76	70*	25
Temporal 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15
Whoop	82	69*	56

*Operating the horn in this mode at this voltage will result in not meeting the minimum ANSI/UL 464 reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private mode).



Tone Switch Locations

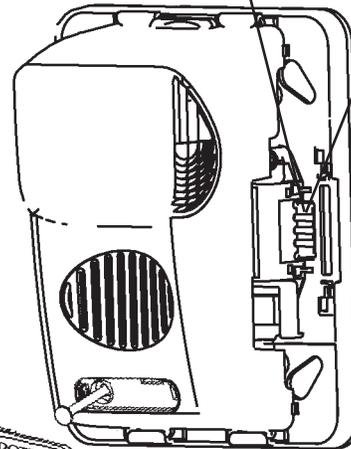
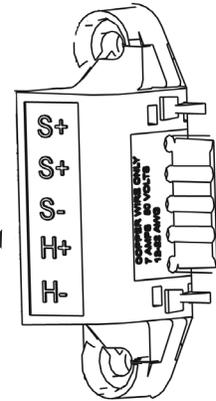
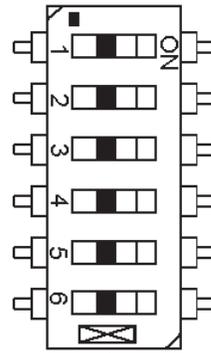
Tone	Switch Position		
	3	4	5
Mechanical Temporal 3	ON	ON	ON
Mechanical - Continuous	OFF	ON	ON
2400Hz - Temporal 3	ON	OFF	ON
2400Hz - Continuous	OFF	OFF	ON
Chime - Temporal 3	ON	ON	OFF
Chime - Continuous	OFF	ON	OFF
Whoop	ON	OFF	OFF
Whoop	OFF	OFF	OFF

NOTES:

- Switch Positions 1 and 2 in the OFF position to select isolated horn and strobe power inputs
- Switch Position 6 ON = HIGH dBA
- Switch Position 6 OFF = LOW dBA

Super Slide® Mounting Bracket

Allows the installer to pre-wire the system, test for system supervision, remove the signal head until occupancy, switch out signals without changing mounting brackets and has locking edge connector for snap-in-place installation.



Checkmate® Instant Voltage Verification

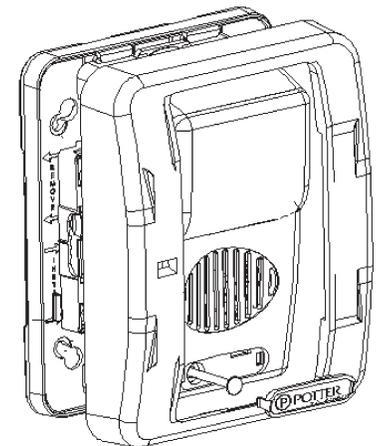
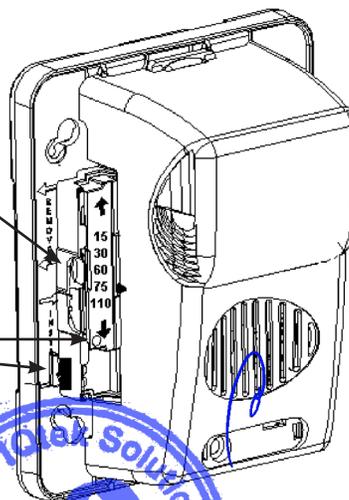
It is often necessary to confirm the voltage drop along the line of devices. The access holes are provided in the back of the terminal block to allow the voltage to be measured directly without removing the device. Typically, this would be done at the end of the line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations.

NOTE: Care should be taken to not short the test probes.

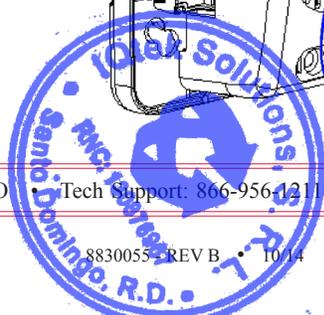
Candela selection slider switch. Depress center and slide switch to desire brightness level.



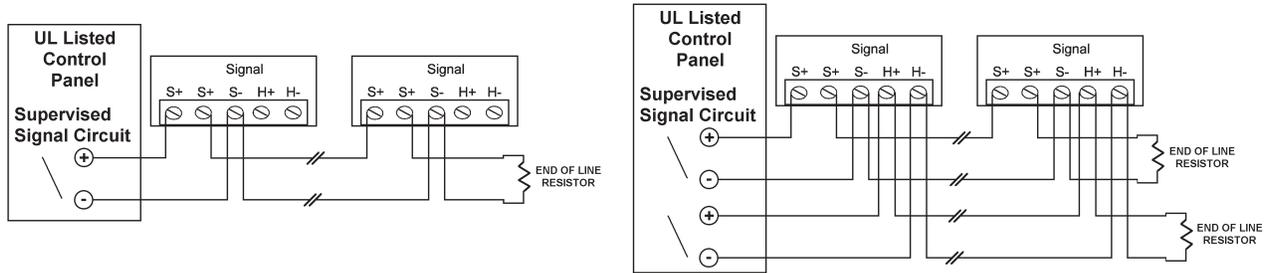
Break off pin and insert into hole at the bottom of the selector to lock candela setting. Signal must be removed from bracket and pin pushed forward from backside out of the hole to change candela.



To remove bezel, grip both sides of bezel and pull in a downward and outward motion.



Wiring Diagrams



NOTES:

- All strobes are designed to flash as specified with continuous applied voltage. Strobes should not be used on coded or pulsing signaling circuits. However, use of the AVSM control module or Gentex synchronization protocol is permitted to synchronize the strobe, horn and/or mute the horn.
- **FOR SYNCHRONIZATION WIRING INFORMATION, REFERENCE AVSM CONTROL MODULE DATA SHEET (8830050) AND/OR AVSM CONTROL MODULE MANUAL FOR SYNCHRONIZATION MODULE WIRING DIAGRAMS. AVSM CONTROL MODULE DATA SHEET AND MANUAL CAN BE OBTAINED AT <http://pottersignal.com> OR CALL POTTER ELECTRIC AT 1-800-325-3936.**

Architect and Engineering Specifications

The audible and/or visible signal shall be Potter Colored Lens Series or approved equal and shall be listed by Underwriters Laboratories Inc. per ANSI/UL 1638 and ANSI/UL 464 and shall have compliance with the polar dispersion requirements of ANSI/UL 1971. The notification appliance shall also be listed with the California State Fire Marshal (CSFM).

The notification appliance (combination audible/visible) shall produce a peak sound output of 100dBA or greater as measured in an anechoic chamber. The signaling appliance shall also have the capability to silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires. Additionally, the user shall be able to select either continuous or temporal tone output with the temporal signal having the ability to be synchronized.

Unit shall be capable of being installed so that any unauthorized attempt to change the candela setting will result in a trouble signal at the fire alarm control panel.

The audible/visible and visible signaling appliance shall also maintain a minimum flash rate of 1Hz or up to 2 Hz regardless of power input voltage. The appliance shall have an operating current of 74mA or less at 24 VDC for the 15Cd strobe circuit.

The appliance shall be polarized to allow for electrical supervision of the system wiring. The unit shall be provided with a mounting bracket with terminals with barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox without the use of an adapter plate. The unit shall have an input voltage range of 16-33 volts with either direct current or full wave rectified power for 24 volt models.

The appliance shall be capable of testing supervision without disconnecting wires. Also, the appliance shall be capable of mounting to a surface back box. The unit shall also be able to verify voltage at the unit without removing unit.



Cylinder Valve Assembly Series



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

CV, PCV, FCV and MCV series

CV Series (Cylinder/Valve)

Cylinder/Valve
Assembly with:

- Cylinder & Valve



PCV Series (Pre-Engineered Nozzle/Cylinder/Valve)

Cylinder/Valve
Assembly with:

- Cylinder & Valve
- Cylinder Strap
- 24V DC Electric Solenoid
- Not ASCO
- Nozzle (Pre-engineered),
Sidewall or Central



FCV Series (Frame/Cylinder/Valve)

Frame Cylinder/Valve
Assembly with:

- Cylinder & Valve
- Cylinder Strap
- 24V DC Electric Solenoid
- Not ASCO
- Nozzle (Pre-engineered),
sidewall or central
- Modular Frame
- Pre-engineered Piping/
Fittings



MCV Series (Modular/Cylinder/Valve)

Modular Cylinder/Valve
Assembly with:

- Cylinder & valve
- Cylinder Strap
- 24V DC Electric Solenoid
- only EA-45 listed w/UL
- Not ASCO
- Nozzle (pre-engineered),
sidewall or central
- Agent Release Control
Panel
- 2- Battery
- 1- Photoelectric Detector,
24 VDC w/ Base
- 1- Ionic Detector, 24 VDC
w/ Base
- Combination Horn/Strobe,
24 VDC
- Strobe Ceiling Mount
- Modular Frame
- Pre-engineered Piping/
Fittings



Cylinder Valve Assembly Series



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

Models: 40, 76, 164, 322, 601 and 910

Cylinder Valves:

The cylinder valves are of a pressure-seated high flow rate design, in order to meet the rapid discharge time specified in NFPA 2001. Each has a brass body, a brass piston with resilient seat, a pressure releasing pilot check, a safety disc assembly, a pressure gauge, and an electric solenoid valve. This relieves the pressure above the piston and permits the piston to travel upward, thus fully opening the valve and permitting the agent to discharge through the outlet. The discharge outlet is fired with an anti-recoil plug, which is a safety device to prevent violent movement of the cylinder in the event of discharge while the cylinder valve is not connected to the piping system structure.

Each Novec™ 1230 fluid fill and use shall be in accordance with the instructions in the engineered or pre-engineered system design manual as required by UL Listing or FM approval.

Architecture/Engineering Specifications:

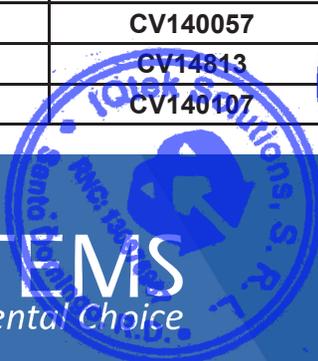
- Filled at factory in single lb. increments
- High flow rate valve
- Electric solenoid operation
- Novec 1230 Clean Agent Extinguishing Fluid
- Optional:
 - Liquid Level Indicator
 - Pneumatic Actuation
 - Manual Actuation
 - Pressure Switch
 - Low Pressure
 - Operational

Key Features

All sizes are charged with agent and pressurized with nitrogen to 360 psig (25 bar) or 500 psig (34.5 bar) at 70°F/21°C. They are manufactured, tested, and marked in accordance with D.O.T. and T.C. specifications: 4BA500 or 4BW500 or TPED for the various sizes.



Cylinder Sizes	Allowable Fill (lbs)	Part Numbers	Listings/Approvals	
			360 PSI/25 Bar	500 PSI/34.5 Bar
40	16-40	CV140069	UL/ULC	FM, UL/ULC
76	31-76	CV140079	UL/ULC	FM, UL/ULC
164	66-164	CV14817	UL/ULC	FM, UL/ULC
322	129-322	CV140057	UL/ULC	FM, UL/ULC
601	241-601	CV14813	UL/ULC	FM, UL/ULC
910	390-910	CV140107	UL/ULC	FM, UL/ULC



Nozzles



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

N 180 and N 360

The SEVO® 1230 system nozzles are designated to provide rapid and thorough vaporization and distribution of agent with the air in the protected space. Standard nozzles are made of aluminum. Pre-engineered system nozzles are made in three pipe sizes: 1", 1 1/2", and 2".

Hydraulically calculated nozzles are available in 1/2", 1", 1 1/2", 2" and 2 1/2" with a selection of orifices designed to provide the proper flow rate and distribution of agent to flood a hazard area. The sidewall nozzle is engineered to provide a 160° drill pattern to prevent dissipation on wall surfaces.

Features

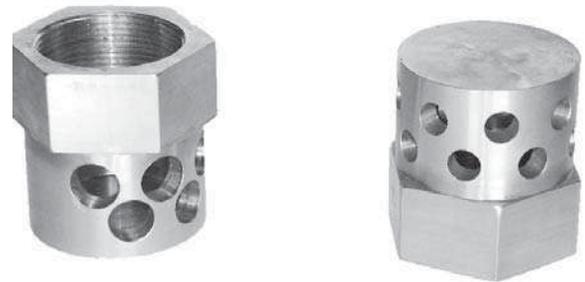
- Pre-engineered sizes: 1", 1 1/2", 2" and 2 1/2"
- Engineered sizes: 1/2", 1", 1 1/2", 2" and 2 1/2"
- 160° and 360° Discharge options
- High flow rate
- Large area distribution coverage

Architecture/Engineering Specifications

Each nozzle has a standard female pipe thread for attachment to discharge piping. Nozzle shall be spaced in accordance with the instructions in the pre-engineered system design manual as required for UL Listing or FM Approval or according to NFPA 2001. Each nozzle shall be marked with the SEVO® Systems part number.

The maximum nozzle height per layer of coverage is 14 ft (4.27m). Nozzles should be placed at least 5" below the ceiling surfaces. Sidewall nozzles have a straight discharge pattern to allow placement along a wall from 7' (2.14m) AFF to 5" (12.7cm) below the ceiling.

Both sidewall and central nozzles are tested for a maximum area coverage using a 32' (9.5m) wide by 32' (9.5m) long enclosure.



Listings/Approvals

360 PSI/25 Bar

500 PSI/34.5 Bar

UL/ULC

FM, UL/ULC



Electrical Actuator



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

SOL EA45

The SEVO electrical actuator is mounted on the top plug of the valve.

The 24 VDC electrical actuator is required to discharge the system electrically from a releasing control panel.

An electrical signal from a releasing control panel sends a signal to the actuator, which operates the internal solenoid to activate a pin, venting pressure from the top of the valve, allowing the piston to rise and discharge Novec™ 1230 fluid through the valve outlet.

Optional:
The electrical actuator allows for a manual actuator to be stacked on top for electrical or manual system activation.



Architecture/Engineering Specifications

Performance:	
Testing	In accordance with UL 864 Recognized to UL 508 CE Approved
Wiring Connections:	
Wire Size	12 AWG
Lead Length	18 in. (457 mm)
Dimensions:	
Body	45 mm diameter (1.77 in.)
L x W	104 mm x 90 mm (4.09 in x 3.54 in)
Environmental and Physical	
Actuation Type	Latching
Power Requirements	24 Volts d.c.
Current	0.2A at 24 Volts d.c.
Reset requirement	Manual Force Required
Electrical Connection	3-pin plug connector

Approvals 360 PSI/25 Bar UL/ULC	Approvals 500 PSI/34.5 Bar FM, UL/ULC
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Electrical Actuator



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

SOL 21857 and SOL 28158

The actuator for SEVO's cylinder is permanently mounted directly to the top of the 1230 valve. The electric solenoid valve is normally closed. The valve requires electrical energy to remain open. The actuation of the solenoid valve from a UL Listed releasing control panel, vents the pressure from the top of the piston allowing the valve to discharge the fluid from the outlet. The volt / amp compatibility ratings are shown as listed by UL under File MP-618 Guide Y102 and complies with test requirement outline in UL Subject 429A for use in Fire Protection Service. The source releasing control panel will determine the number and rating of electric solenoids used. For use with 360 and 500 psi systems.



Part Number	Type	Voltage	Amps	Rating	Listings/Approvals	
					360 PSI/25 Bar	500 PSI/34.5 Bar
SOL21857	S	12 VDC	.76	9.11 Watts	UL/ULC	FM
SOL21858	S	24 VDC	.38	9.11 Watts	UL/ULC	FM



Pneumatic Actuator



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

PA 3000

The Pneumatic Actuator Control Head features a pneumatically driven piston that depresses a check valve, releasing the pressure from the top of the piston, allowing the cylinder discharge.

The pneumatic pressure required to operate the Pneumatic Actuator Control Head is obtained from the “M” port of a main cylinder that is either mechanically and/or electrically actuated.

Multiple cylinders equipped with Pneumatic Actuator Control Heads can be activated from one main cylinder using 1/4” copper tubing, 1/4” metal flex hose or 1/8” pipe.

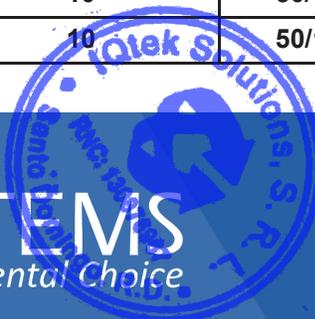
The Pneumatic Actuator Control Head mounts directly to a top plug adapter directly on top of the cylinder valve.

Features

- Self Venting
- Mounting on Top Plug of Cylinder Valve
- Material – Brass



Part No.	Cylinder Size	Valve Outlet Size	Maximum Number of Piston Actuators	Total Max Length Tubing (ft/m)	Approvals 360 PSI/25 Bar	Approvals 500 PSI/34.5 Bar
140069	40	1”	10	50/15.24m	UL/ULC	FM, UL/ULC
140079	76	1”	10	50/15.24m	UL/ULC	FM, UL/ULC
14817	164	1.25”	10	50/15.24m	UL/ULC	FM, UL/ULC
140057	322	2.5”	10	50/15.24m	UL/ULC	FM, UL/ULC
14813	601	2.5”	10	50/15.24m	UL/ULC	FM, UL/ULC
14975	910	3” grooved	10	50/15.24m	UL/ULC	FM, UL/ULC



Manual Actuator



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

MA 3033

The manual actuator features a push lever that vents pressure through the top of the valve which allows the piston to rise and allow for Novec 1230 fluid to discharge through the valve outlet.

The manual actuator also has the option to mount on top of the stackable electric actuator (SOL EA45) Allowing electrical or manual system activation.

Features

- Self Venting
- Mounting on Top Plug of Cylinder Valve or Electric Solenoid
- Material – Brass

Dimensions:

Body: 1.77 in.. (45mm)
L x W: 1.75 in. dia. x 3.25 in.
44.45mm dia. x 82.55 mm

Environmental and Physical:

Body material: Brass
Actuation Pin: Stainless Steel

Pull out Pin
Push down Plunger to Discharge System

Note: Plunger requires 7lbs of force to discharge system



Approvals	Approvals
350 PSI/25 Bar	500 PSI/34.5 Bar
UL/ULC	FM, UL/ULC



Cylinder Straps



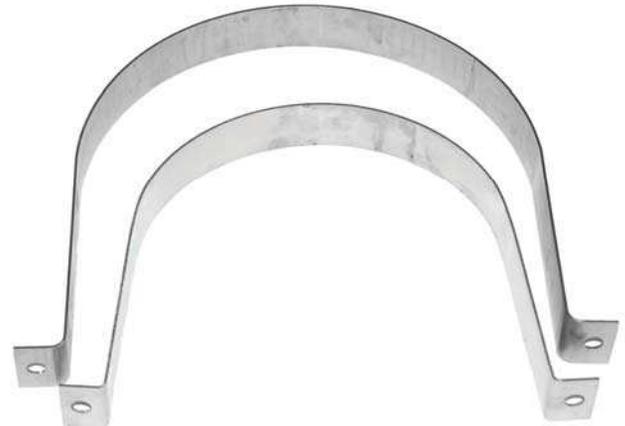
Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

ST 10100, ST 10200, ST 10600, ST 10900

The mounting brackets are used to securely attach the cylinder to a wall or a unistrut frame channel.

The straps are manufactured of stainless steel band formed to the radii of the cylinders with flanges for bolting to continuous slot framing channel 1100 H unistrut.

The channel is to be provided by installer. The cylinder bracket must be secured to a surface such that the bracket will withstand a load up to 5 times the cylinder weight.



Part No.	Quantity Required	Cylinder Size (lbs)	Cylinder O.D. (in)	Width (in)	Listings/Approvals	
					360 PSI/25 Bar	500 PSI/34.5 Bar
ST10100	1	40/76	10	12.25	UL/ULC	FM, UL/ULC
ST10200	1	164	12.75	15	UL/ULC	FM, UL/ULC
ST10600	1	322/601	20	22.25	UL/ULC	FM, UL/ULC
ST10900	2	910	20	27	UL/ULC	FM, UL/ULC



Pressure Switches



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

PS 10-500

Pressure Supervisory Switch

The pressure switch monitors the pressure within the SEVO® 1230 cylinder at 360psi or 500psi (25 or 34.5 Bar) should a loss of the nitrogen occur. The pressure switch contact transfers indicating a problem. The low pressure switch is normally wired into a supervisory circuit to give a trouble signal upon activation.

Characteristics

0.125 & 127 NPT male thread
360psi (25 Bar) systems @ 70°F:
Actuation pressure 319psi + 10 (22 Bar + 0.689)
500psi (34.5 Bar) systems @ 70°F:
Actuation pressure 464psi + 10 (32 Bar + 0.689)
Temperature -65°F to 275°F 600
psig proof pressure 5,000 burst pressure

Contacts:

Silver 2AMP 28VDC 375 VA – 120 VAC Pilot Duty
Normally Open:

(Blue PVC insulated wire #18 AWG 600V 105°C)

Normally Closed:

Black PVC insulated wire #18 AWG 600V 105°C)

Common:

(Violet PVC insulated wire #18 AWG 600V 105°C)



Approvals	Approvals
360 PSI/25 Bar	500 PSI/34.5 Bar
UL/ULC	FM, UL/ULC

Pressure Operating Switch

The operation pressure switch is used to provide a means of detecting system activation. Upon activation of the cylinder valve, the operation pressure switch contact transfers to indicate discharge or to perform disconnect/activation required during system operation.

Characteristics

0.125 – 27 NPT male thread
Actuation pressure: 58+ psig (4 Bar) @ -65°F (18.3°C)
250 proof pressure 5,000 burst pressure
Contacts – silver – 20 amps 120VAC / 240 VAC

Normally Open:

SPDT (Red- PVC insulated wire # 18 AWB 600V 105°C)

Normally Closed:

(Black PVC insulated wire #18 AWG 600V 105°C)

Common:

(White PVC insulated wire #18 AWG 600V 105°C)



PS 37

Approvals	Approvals
360 PSI/25 Bar	500 PSI/34.5 Bar
UL/ULC	FM, UL/ULC



Pressure Gauge Integrated Switch

Visual and Electrical Indication Device



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

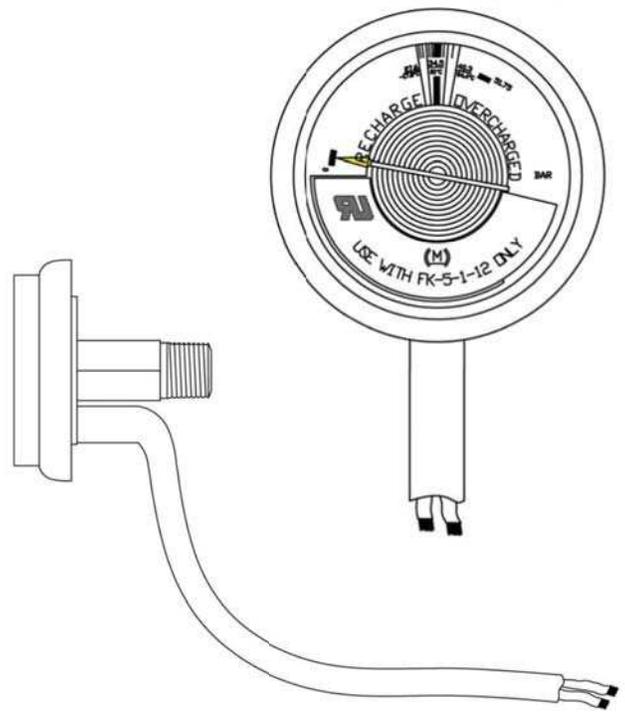
M5011-500PSN

The SEVO® Systems Gauge-Integrated Switch allows for both visual and electronic monitoring of a pressurized system by eliminating the need for a separate pressure switch and gauge, thus reducing equipment costs and the number of access ports necessary in a system.

In the event of discharge or pressure drop, a magnet on the back of the indicator trips a switch in the dial face activating an output relay. The output relay can be set in a normally closed-state or normally open-state. When the switch is tripped, the output relay changes state, providing a supervisory signal.



Approvals	Approvals
360 PSI/25 Bar	500 PSI/34.5 Bar
UL/ULC	FM, UL/ULC



Key Features	
Input Voltage	16 – 30VDC
Input Current: Normal State:	16 mA
Input Current: Alternate State:	7 mA
Output Relay Contact Rating:	100 mA @ 30VDC 8 Ohms max when closed
Standard Tether Length:	36", 4 conductor, 26 AWG gauge end, 18 AWG interconnection end, PVC insulation
Tether Wiring Color Code:	Red: Positive DC Input Power Black: Negative DC Input Power Yellow: Switch Relay Contact Output Blue: Switch Relay Contact Output



Liquid Level Indicators



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

LL 30020-1, LL 30020-2

The SEVO® 1230 LL-30020 Series Liquid Level Indicator (LLI) is a simple, manually operated device which provides a means to determine the fluid level in a vertically mounted cylinder.

Use of this device allows for the content of fluid to be determined without removing a cylinder from its bracketing and piping for weighing.

The LLI does not require additional space when cylinder is installed. Using the LLI does not require shutting down clean agent system or interrupting fire protection in order to take a reading. The LLI is made of flexible tape, allowing use in confined spaces.

OPERATION

A magnet-equipped float moves with the fluid level along the stem. The level is obtained by removing the protective cap and pulling out the calibrated tape until the magnet interlocks with the float. The weight is then determined by converting the level measurement into a weight amount by using the conversion tables. The operating temperature range is 32°F to 130°F (0°C - 54.5° C).

Architecture/Engineering Specifications

The fluid-storage cylinders of 322, 601 or 910 pound capacity shall be fitted with a reliable means of measuring fluid weight during normal routine service without interruption to the system operation.

Features:

- Flexible Indicator Tape
- Calibrated Measurement
- Material – Brass
- Float - BUNA



Approvals	Approvals
350 PSI/25 Bar	500 PSI/34.5 Bar
UL/ULC	FM, UL/ULC



Key Maintenance Switch



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

The SEVO® 1230 Key Maintenance switch provides a means of disabling the releasing circuit on 24VDC suppression systems.

Releasing circuit condition is indicated by two face plate-mounted LEDs. Circuit is disabled by turning the individually keyed switch.

The device consists of a stainless steel faceplate, two LED indicators and a modular switch assembly. It is designed to mount on a standard single gang electrical enclosure.
Key Features

UL recognized switch

Dimensions:
2 3/4" W x 4-1/2" H x 2" D (Approximate)
Mounts on single gang or handy box

Contact Rating:
One N.O. key operated switch
4 Amps @ 120/240 VAC
Power Requirements: 24 VDC, 50 mA

Environmental Specifications:
Indoor use only
Temperature range: -22°F to 140°F (-30°C to 60°C)



Main Reserve Switch



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

SOL 20195

Included Items:

- Operator
 - 10 AMP
 - 120/240 Volts
 - UL 297E
- Switch
 - 2 Position
 - Tightening Ring
 - Labeled Back Plate



Manual Actuator



Designed with:
3M™ Novec™ 1230
Fire Protection Fluid

MA 3033

The manual actuator features a push lever that vents pressure through the top of the valve which allows the piston to rise and allow for Novec 1230 fluid to discharge through the valve outlet.

The manual actuator also has the option to mount on top of the stackable electric actuator (SOL EA45) Allowing electrical or manual system activation.

Features

- Self Venting
- Mounting on Top Plug of Cylinder Valve or Electric Solenoid
- Material – Brass

Dimensions:

Body: 1.77 in.. (45mm)
L x W: 1.75 in. dia. x 3.25 in.
44.45mm dia. x 82.55 mm

Environmental and Physical:

Body material: Brass
Actuation Pin: Stainless Steel



Approvals
500 PSI/34.5 Bar
FM





UL recognized components

Dimensions:

2 3/4" W x 4-1/2" H x 2" D (Approximate)
Mounts on single gang or handy box

Contact Rating:

Key operated switch with 2 N.O. contacts
2.5A/125VAC, 350 mA/125VDC

Power Requirements: 24 VDC

Environmental Specifications:

Indoor use only
Temperature range -22°F to 140°F (-30°C to 60°C)

Stock number: 3001002

Description

The device consists of a stainless steel faceplate and a modular switch assembly. It is designed to mount on a standard single gang electrical enclosure.

Application

The RCDS-1 complies with the requirements of NFPA 72, 2007, 6.12.5, 6.12.5.1, and 6.12.5.2:

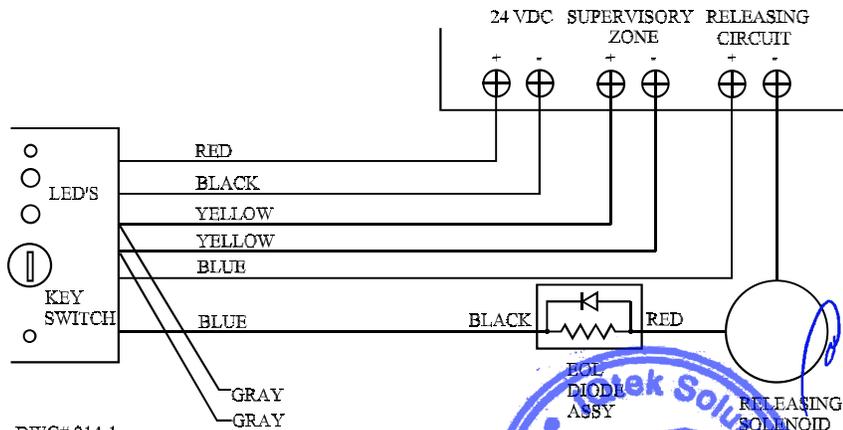
- Specifying a physical switch to disconnect the release circuit in place of a software controlled disconnect.
- Creating a supervisory condition on the associated release panel.

Installation and Operation

1. Connect the red and black leads to the 24 VDC auxiliary power terminals on the release panel. Be certain to observe polarity.
2. Connect the yellow wires to the supervisory zone on the panel.

NOTICE

The connection for the supervisory circuit has 4 wires: 2 yellow and 2 grey. The 2 yellow wires are for connection to the supervisory circuit. The 2 grey wires are for connection to additional supervisory devices or the EOLR for the supervisory zone.



Hoja Suelta

Parte Número: ASD720

Características

- Alerta Más Temprana
- Sensor de Alta Sensibilidad de Dispersión de Luz
- Una zona/ Max. 8 Puntos de Muestreo/82 Metros de Tubería (270ft.)
- “Auto” Puesta en Marcha
- Supervisión de Flujo “Frecuencia”
- Potente Ventilador de Aspiración
- Único Punto de Mantenimiento
- Contactos de Fuego y Falla Bloqueado/Sin Bloquear
- Programa de Cálculo de Tuberías “SafeCalc”

Descripción

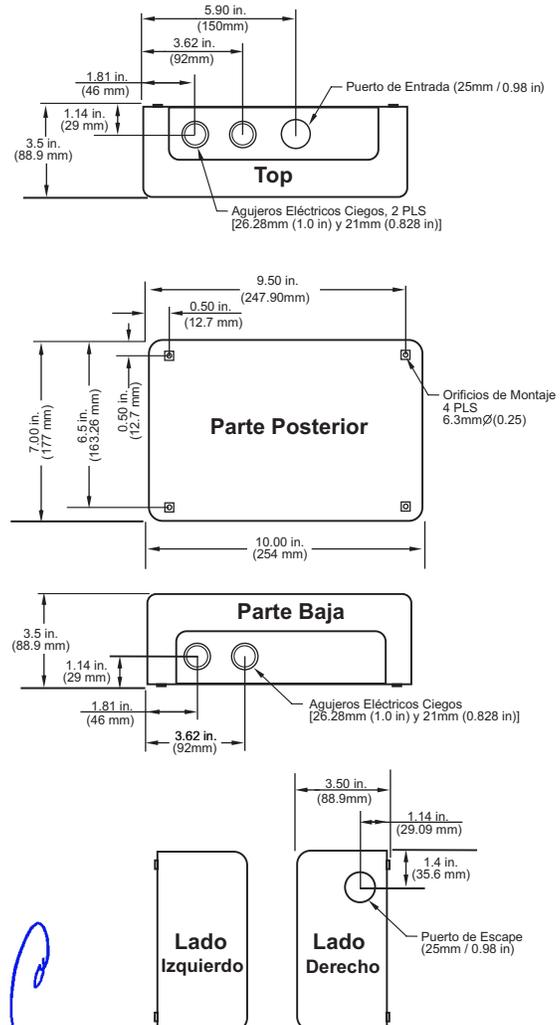
El Detector de Aspiración de Humo SafeASD-720 está diseñado para áreas de hasta 668 metros cuadrados (7,200 pies cuadrados). El recorrido total de tubería de muestreo es de hasta 82.3 metros (270 pies) de 25 mm (3/4 "SCH-40), para extraer muestras de aire desde el riesgo protegido y llevarlas al detector para su análisis. El número máximo de 8 puntos de muestreo, deben estar espaciados a no más de 9 metros (30 pies). El espacio entre las tuberías de toma de muestras no deben superar los 9 metros (30 pies) de distancia. Los botones Reiniciar, Silenciar, así como los indicadores LED de alarma, Falla y Alimentación se utilizan para el funcionamiento y Anunciación. Solución de Problemas incorporado mediante indicador LED.

Especificaciones

Voltaje de Entrada:	24VDC
Consumo de corriente	270 @ 24VDC
Dimensiones:	254mm x 177mm x 88.9mm (10" x 7" x 3.5")
Peso:	1.8 kg (3.5 lbs)
Temperaturas de Operación:	0°C a 37.8°C (32°F a 100°F)
Grado de Humedad:	0-90% sin condensación
Área de Detección:	668 sq m (7,200 sq ft). Max.
# de Tuberías de Muestreo:	1
Tubería de Muestreo:	25mm (3/4" SCH-40)
Max.Longitud de Tubería:	Hasta 82.3m (270 ft)
# de Puntos de Muestreo:	min 2, max 8 por detector
Área de Protección por Punto de Muestreo:	9m x 9m máximo (30' x 30')
Contacto de Alarma:	1 Total, 1A @ 30VDC
Contacto de Falla:	1 Total, 1A @ 30VDC
Sensibilidad del Detector:	.6% obs/m (0.2% obs/ft-UL)



Detalles



5915 Stockbridge Drive
 Monroe, NC 28110
 Phone: 704-821-7920
 Fax: 704-821-4327
 www.safefiredetection.com





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ESPECIFICACIÓN TÉCNICA MODELO 5 HB

Extintores BADGER de Halotron

El más efectivo agente limpio con capacidad para extinguir fuegos de clase B y C. Cuando no es una opción experimentar retrasos, tiempos de inactividad e interrupciones por la necesidad de limpieza del agente extintor luego de la extinción, entonces simplemente, Halotron-1 es la opción. Estos extintores de gran calidad contienen un agente de extinción limpio, versátil y eficaz capaz de abordar la mayoría de los riesgos bajos de fuego clase B y C que se encuentran en instalaciones comerciales e industriales. Es ideal para salas de computadoras, almacenamiento de datos, telecomunicaciones, robótica o cualquier proceso industrial de alta tecnología que requiera un agente limpio efectivo. Los modelos Badger de Halotron-1 son una alternativa ambientalmente aceptable para reemplazar el Halon-1211. Los modelos de 11 y 15.5 libras son adecuados para su uso en incendios de clase A, B y C., los de menor capacidad para incendios de la clase B y C.

Material de la Válvula: BRONCE CROMADO / Material de Manija y Palanca: Acero Inoxidable

CERTIFICACIONES/APROBACIONES:

ANSI UL/2129, ANSI/UL 711, ISO 9001, ISO 14001. NFPA 10. Aprueba Inspección INDECI INDECI. Cumple NTP 350.043, 350.062, Aprobación USCG, Type A Size-II Type B:C Size-II



Datos Técnicos:

PRESIÓN DE PRUEBA

300 PSI

PRESIÓN DE TRABAJO

100 PSI

RATING UL:
5B:C

CAPACIDAD DE CARGA:
5 Libras



MEDIDAS

Altura: 38.7 cm.
Ancho: 15.6 cm
Fondo/Diámetro:
10.8 cm



TIEMPO DE DESCARGA

9 seg. de
descarga
continua



TEMPERATURA

de Trabajo:
-40° C a 48.9° C



PESO

4.8 kg
aprox.



ALCANCE

2.7 a 4.6
Metros.



ABC Importaciones y Servicios S.R.L.

Certificación ISO 9001
en **Mantenimiento de Extintores**





Santo Domingo, Rep. Dom.
Noviembre 11, 2022.

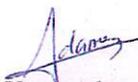
INSTITUTO NACIONAL DE PROTECCION CONTRA INCENDIO SRL
At. Carlos Hosking

Asunto: Reconocimiento Distribuidor Autorizado

Por este medio nos permitimos confirmar que la empresa INCIFIRE, Instituto Nacional de Protección Contra Incendio SRL es distribuidor autorizado de las marcas **KIDDE SAFETY** y **BADGER FIRE** por tanto puede cotizar, suministrar, instalar y prestar mantenimiento a extintores portátiles de las marcas **KIDDE SAFETY** y **BADGER FIRE**, en República Dominicana.

Esta autorización es válida por doce (12) meses a partir de la fecha de emisión.

Cordialmente


Yanet Adames
Sales Manager
Fire & Security Products



El asistente ha pasado 14 horas en el curso de dos días,
cubriendo los siguientes temas:

1. Fluido de protección contra incendios Novec™ 1230 de 3M™.
2. Hardware SEVO™ Systems.
3. Diseño del sistemas SEVO™.
4. Instalación.
5. Mantenimiento y recarga.
6. Sistemas SEVO™ Flex para pequeños espacios.
7. SEVO™ Cube para gabinetes cerrados.

Certificamos que

Alejandro Soto Hosking

INCIFIRE

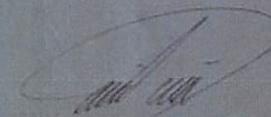
República Dominicana



Ha completado el entrenamiento de certificación en los
productos SEVO™ Systems que utilizan el Fluido de
Protección Contra Incendios Novec1™ 230 de 3M™.

Septiembre 18 y 19 de 2018

Fecha



Daniel Peña B.

VicePresident of Marketing and Sales.

SEVO Systems Latin America, LLC | UNITED STATES OF AMERICA

Válido por 3 años a partir de la Fecha de emisión.



SEVO  **SYSTEMS**

Santo Domingo, R. D.
11 de noviembre del 2022.

Señores,
JUNTA CENTRAL ELECTRORAL
JCE-CCC-CP-2022-0028
Sus manos,

Distinguidos Señores:

Luego de un cordial saludo, nos dirigimos a ustedes con la finalidad de informar que **IQtek Solutions SRL** es un socio comercial el cual está autorizado a promover nuestros productos y servicios. Esta relación comercial es desde el año 2016 manejando juntos importantes proyectos a nivel nacional.

La propuesta contempla el suministro e instalación de los Sistemas de Detección y Supresión con Agente Limpio. Para el Sistema de Detección proponemos equipos de la marca Potter Signal y para la parte del Sistema de Supresión con Agente Limpio proponemos la marca Sevo System.

Esta comunicación se expide a solicitud de la parte interesada;

Muy atentamente,



Carlos. Hosking
Presidente

