

ULTIMA® X5000 Monitor de gases



SABEMOS LO QUE ESTÁ EN JUEGO.

SABEMOS QUE TE AGOBIA...



*"TENER QUE DESCONECTAR EL
DISPOSITIVO ANTES DE CAMBIAR UN
SENSOR"*

*"TENER QUE RECORDAR CÓMO
CALIBRARLO".*

*"TENER QUE MANEJAR UN CABLE
REALMENTE LARGO PARA INSTALAR EL
DETECTOR DE GAS".*

*"NO SABER SI REALMENTE EL DETECTOR
DE GAS ESTÁ EN FUNCIONAMIENTO".*



*Y NO HABÍA NADA QUE
PUDIERAS HACER... HASTA
AHORA*

*"PREOCUPARME POR
PERDER EL IMÁN
CUANDO HAY COSAS MÁS
IMPORTANTES EN QUÉ
CONCENTRARSE".*



DISEÑO COMPLETAMENTE NUEVO

MSA
The Safety Company



ESTADO DE CONEXIÓN
BLUETOOTH®

INDICADOR
DINÁMICO DE
OPERACIÓN



INDICADOR DE
LECTURA DE
GAS Y BARRA DE
PROGRESO

LED BRILLANTE
PARA INDICAR
EL ESTADO

INDICADORES DEL ESTADO DEL
DISPOSITIVO



Encendido



Falla



Alarma

MANTÉN LA CONEXIÓN. TRABAJA MEJOR.

- Tecnología Bluetooth inalámbrica.
- Revisa el estado y recibe alertas hasta a 23 m (75 pies) de distancia.
- Modifica la configuración/ajustes/alarmas.
- Inicia la calibración y revisa el progreso.
- Reduce el tiempo de configuración en al menos 50%.



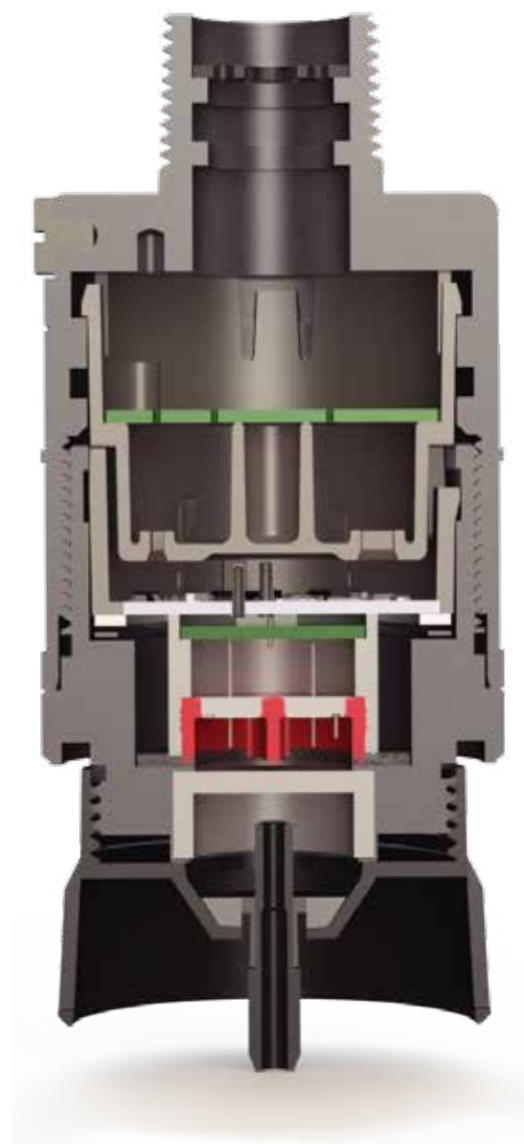
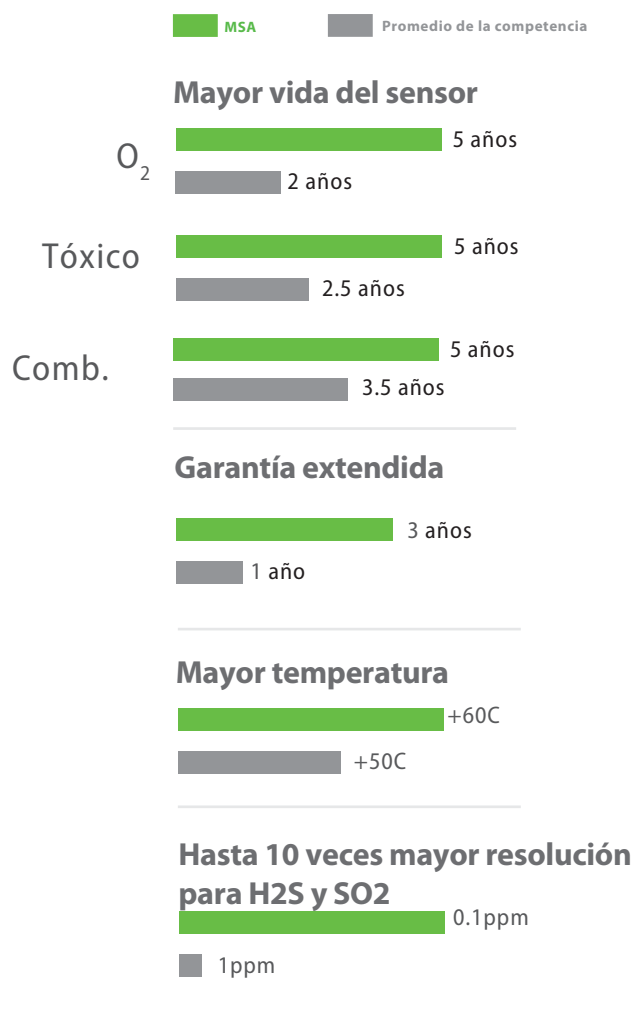
X/S Connect App

MSAsafety.com

TECNOLOGÍA AVANZADA DEL SENSOR

¡Hasta **1.5 AÑOS** sin tener que calibrar!

XCell[®]
S E N S O R S



* Los datos pueden variar para diferentes gases y configuraciones.

RE-CALIBRA TUS EXPECTATIVAS



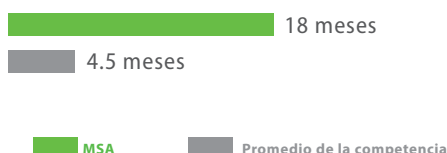
Compensación ambiental adaptativa (AEC)

Mayor vida del sensor



Auto-chequeos automáticos 4 veces al día

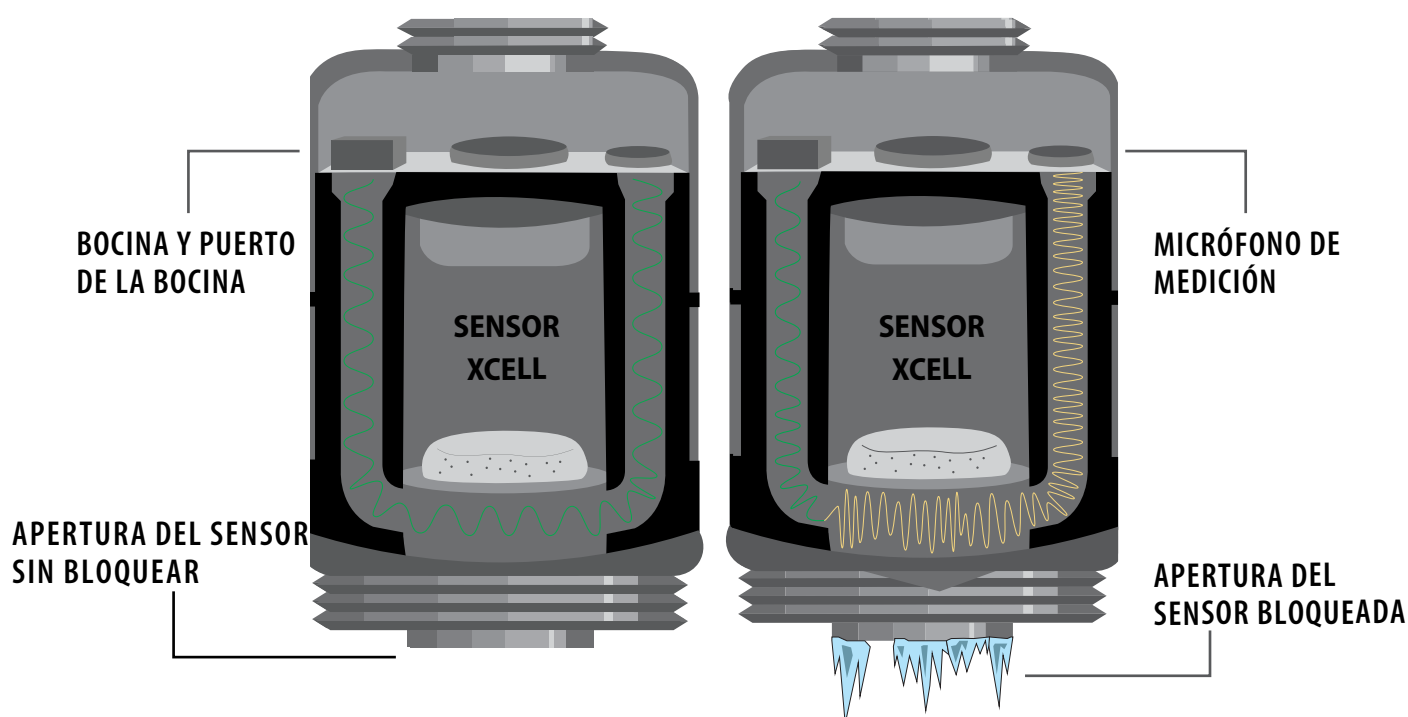
Ciclos de calibración más largos



Mayor estabilidad (menor variación)



Supervisión de difusión (DS)



La supervisión de difusión avisa si la entrada del sensor está bloqueada y el dispositivo no puede detectar los gases. Para ello, emplea un diseño mecánico acústico patentado y algoritmos exclusivos para medir el sonido justo a la entrada del sensor. Si la entrada está bloqueada con algún material, como hielo, detecta la diferencia en el sonido y el estado del dispositivo cambia a "Falla". Cuando se elimina la obstrucción, la supervisión de difusión lo detecta y el dispositivo vuelve a su funcionamiento normal.

*Disponibilidad de TruCal para los sensores XCell de CO y H2S

HAZ MÁS CON MENOS

ACTUALIZACIÓN SENCILLA

DISEÑO DE MONTAJE Y CABLEADO IDÉNTICOS AL DE LA SERIE DE DETECTORES DE GAS ULTIMA X.

SOPORTE INTEGRAL PARA
MONTAJE EN TUBO DE 2"
(50.8 MM)

ROSCAS M25
O NPT DE 3/4"
(19 MM)

SENSORES DOBLES
Y SALIDAS
ANALÓGICAS

INTERFAZ
TÁCTIL PARA
OPERACIÓN SIN
HERRAMIENTAS.

Sensores digitales de
gases combustibles,
tóxicos o de oxígeno.

CAPACIDAD DE DETECCIÓN
DOBLE PARA CUALQUIER
COMBINACIÓN DE SENSORES.

ORIFICIO PARA ETIQUETA

OPCIONES DE MENÚ EN
DISTINTOS IDIOMAS

UTILIZA
XCell
SENSORS

CON

TruCal
PLATFORM

SafeSwap[®]

Reemplaza los sensores de
forma segura y rápida sin
apagar el dispositivo.



LA OPCIÓN MÁS SENSATA... ¡EN TODOS LOS ASPECTOS!



VIDA ÚTIL ESPERADA



GARANTÍA



PATENTES

Te ayudaremos a tener un ahorro de...*

Costos de instalación

30%

~\$7,000

Costos de
mantenimientos anual

50%

~\$1,500

Costos durante
la vida del producto

75%

~\$15k

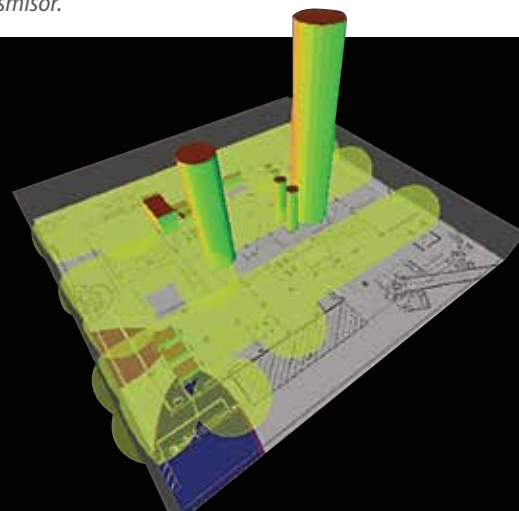
**Solicita una comparación
de costo de propiedad**

* Basado en 10 sensores y 2 sistemas sensores/transmisor.

¿Preguntas sobre dónde colocar el sensor?

El nuevo servicio de mapeo de gases y llamas de MSA combina 150 años de experiencia en detección de gases con tecnología 3D para ayudarte a elevar al máximo la eficacia de cada sensor.

Consulta el link o escanea el código QR para obtener más información: MSAsafety.com/gas-mapping



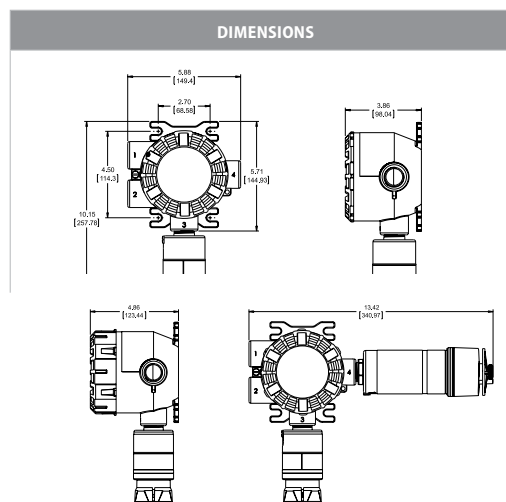
Monitor de gases ULTIMA X5000

Especificaciones



ESPECIFICACIONES DEL PRODUCTO	
TIPO DE SENSOR DE GAS COMBUSTIBLE	Catalítico (XCell combustible) Infrarrojo (XIR PLUS)
TIPO DE SENSOR DE GAS TÓXICO Y DE OXÍGENO	XIR Plus Dióxido de carbono CO2 XCell Tóxico Monóxido de carbono (CO) Monóxido de carbono (CO) resistente a H2 Sulfuro de hidrógeno (H2S) Cloro (CL2) XCell O2 Oxígeno O2 XCell SO2 Dióxido de azufre (SO2) Electroquímico Hidrógeno (H2) Dióxido de nitrógeno (NO2)
RANGOS DE MEDICIÓN DEL SENSOR	Combustible 0-100 % LEL CO2 0-2 %, 0-5 % Vol. CO 0-100, 0-500, 0-1000 ppm CO, Resistente a H2 0-100 ppm CL2 0-5, 0-10, 0-20 ppm H2 0-1000 ppm H2S 0-10, 0-50, 0-100, 0-500 ppm NH3 0-100 ppm, 0-1000 ppm NO2 0-10 ppm O2 0-25 % SO2 0-25 ppm
VIDA TÍPICA DEL SENSOR	Sensores XCell 5 años Infrarrojo 10 años
CLASIFICACIÓN DE LAS APROBACIONES	Los distintivos varían según los componentes. Revisa el Manual para obtener mayor información acerca de los distintivos específicos de los componentes.
DIVISIONES (EE.UU./CANADÁ)	Clase I, II, III; Div. 1 y 2, T4/T5/T6;
ZONAS (INTERNACIONAL)	Ex db nA IIC T5 Gb (Clase I, Zona 1/ Zona 2) Ex tb IIIC T85°C Db (Clase II, Zona 21)
CLASIFICACIÓN DE CARCASA	Tipo 4X, IP66
GARANTÍA	Transmisor X5000 2 años XIR PLUS 10 años la fuente 5 años los componentes electrónicos Sensores XCell 3 años
APROBACIONES	Sensores electroquímicos Varía según el gas CSA, ATEX, IECEx, INMETRO, DNV Marine, Distintivo CE. Cumple con las normas C22.2 Núm. 152, FM 6320. RED, FCC; adecuado para SIL 2.
ESPECIFICACIONES AMBIENTALES *	
INTERVALO DE TEMPERATURAS DE OPERACIÓN	*Puede diferir según el gas. Consulta el manual. XCell -40 °C a +60 °C XIR PLUS -40 °C a +60 °C
INTERVALO DE TEMPERATURA DE ALMACENAJE	-40 °C a +60 °C
HUMEDAD RELATIVA (NO CONDENSANTE)	XCell Tóxico y O2 10-95 % XCell combustible 0-95 % XIR PLUS 15-95 %

ESPECIFICACIONES MECÁNICAS	
ENTRADA DE ALIMENTACIÓN	11 a 30 VDC, cable de 3 hilos, < 5 W nominal
SALIDA DE LA SEÑAL	Fuente de corriente doble de 4-20 mA, HART
BLUETOOTH (OPCIONAL)	Bluetooth de baja energía (BLE) v4.3 o posterior
INTERVALOS DE RELÉ	5A @ 30 VDC; 5A @ 220 VAC (3X) SPDT – falla, advertencia, alarma
MODOS DE RELÉ	Común, discreto, bocina
POTENCIA MÁXIMA NOMINAL CON RELÉS	XIR PLUS 6.7W XCell combustible 4.9W XCell Tóxico y O2 2.8W XIR PLUS y XCell combustible 10.9W XIR PLUS y XCell Tóxico u O2 7.0W XIR PLUS Dual 11.6W XCell Tóxico y O2 Dual 3.6W XCell combustible Dual 10.6W XCell Comb y XCell Tóxico u O2 Dual 5.3W
NORMAS DE COMPATIBILIDAD ELECTROMAGNÉTICA	Cumple con las normas EN 50270, EN 61000-6-4, EN 61000-6-3
PANTALLA	LED orgánico (multilingüe) con relación de contraste 2000:1 y ángulo de visión de 160°
HART	HART 7, lenguaje de descripción del dispositivo HART disponible.
MONITOREO DE FALLAS	Bajo voltaje de alimentación, suma de verificación de errores RAM, suma de verificación de errores flash, errores EEPROM, errores de circuito interno, relé, configuración inválida del sensor, fallas del sensor, fallas del sistema general.
CABLEADO	Cable de 3 hilos (sensor único) o cable blindado de 4 hilos (sensor doble). Consulta el manual para conocer las distancias de montaje y el calibre del cable.



Nota: Este boletín contiene únicamente una descripción general de los productos mostrados. Aunque se describen los usos y la capacidad de desempeño, por ninguna circunstancia deberán usar el producto individuos no capacitados o no calificados para ello, y tampoco sin que se hayan leído y entendido completamente las instrucciones del producto, incluida cualquier advertencia. Las instrucciones contienen la información completa y detallada acerca del uso y cuidado correctos de estos productos. Las especificaciones están sujetas a cambios sin previo aviso.

MSA está presente en más de 40 países alrededor del mundo. Para encontrar una oficina de MSA cerca de ti, por favor visita MSAsafety.com/offices.



Flashing LED Hazardous Location Warning Light with XLT™

Model 191XL

RUGGED DESIGN FOR USE IN HAZARDOUS LOCATIONS

- XLT™ Technology
- Available in 24VAC/DC, 120-240VAC and 277VAC
- Five lamp/lens colors
- Flashing mode standard, configurable to Steady-burn
- 60,000 hour, vibration resistant LED lamp
- Available in 3/4-inch NPT pipe mount or surface mount
- Dome guard included
- Type 4X, IP66 enclosure, Marine Listed
- UL and cUL Listed

The model 191XL is a hazardous location flashing signal light that features the super bright LED array with XLT™, eXtreme Light Technology. The unit is available in 24VAC/DC, 120VAC or 240VAC and five colors: Amber, Blue, Clear, Green, and Red. The 191XL comes standard in flashing mode and is field configurable to steady burn mode for maximum functionality.

The Model 191XL has been certified by UL as meeting Type 4X water-tight and corrosion-resistant requirements, and IP66 rated. This hazardous location warning light has an aluminum base, coated for corrosion-resistance, that can be ordered. A dome guard fits over the glass dome to protect it against accidental collision with moving equipment, such as a forklift.

Federal Signal's super bright LED array used in the 191XL produces intense light output and 60,000 hours of service. Increased shock and vibration resistance add to this unit's rugged industrial portfolio of features.

The 191XL is UL Listed for Class I, Division 2, Groups A, B, C and D; Class II Division 1, Groups E, F and G; and Class III.

Model	Voltage	Operating Current	In-rush Current	Flash Rate/Minute	Mount
191XL-*024**	24VAC/DC	0.40 amps	1.75 amps, 5.0 mS	60	3/4" NPT Pipe
191XL-*120-240**	120/240VAC	0.21/0.13 amps	2.0 amps, 0.25 mS	60	3/4" NPT Pipe
191XL-*277**	277VAC	0.13 amps	9.75 amps, 0.25mS	60	3/4" NPT Pipe

* Include (S) for Surface Mount Option (Example part number: 191XL-S024R for surface mount option, 191XL-024R for pipe mount)

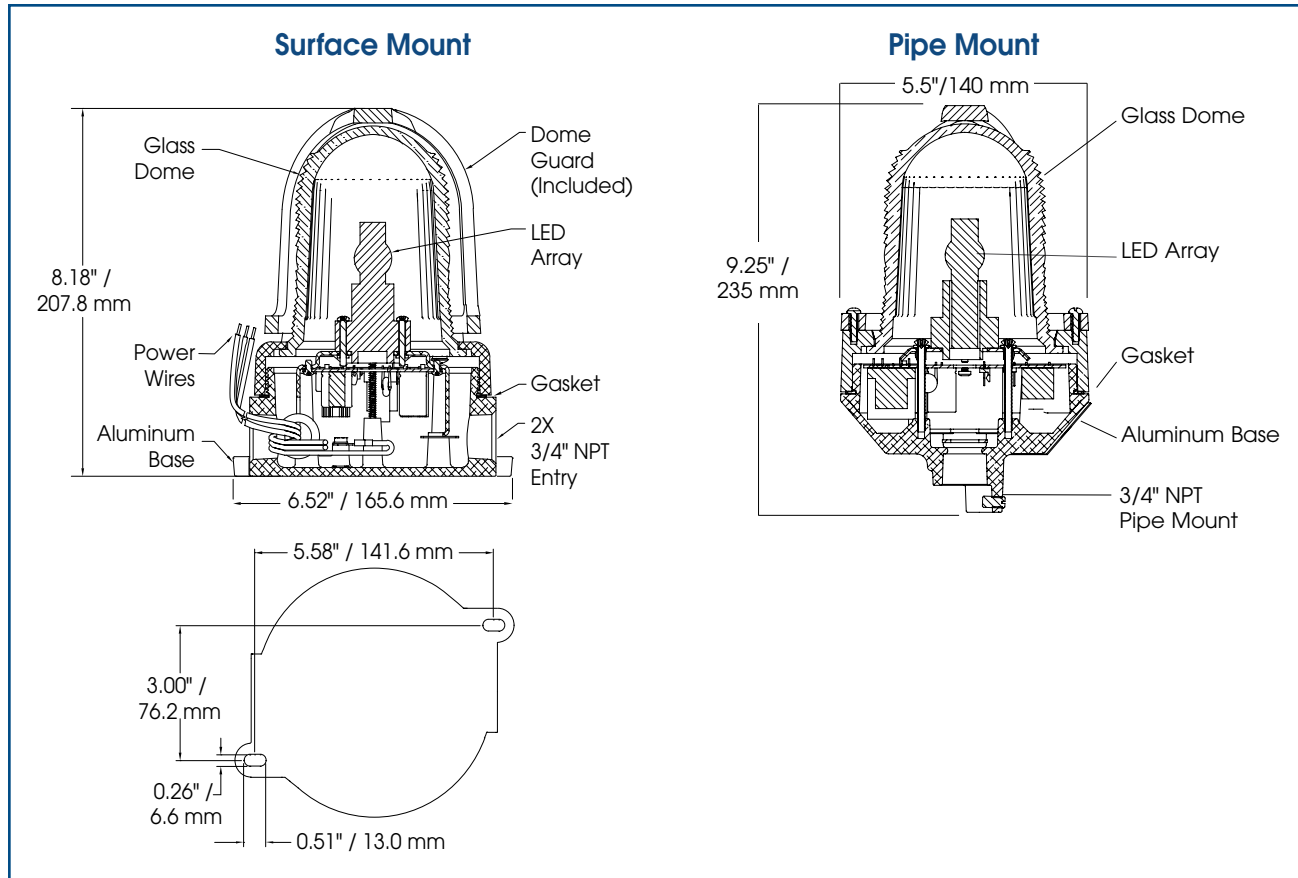
** Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green or (R) Red



Hazardous Location Rating:

Hazardous Location	T-Code at Maximum Ambient Temperature, °C								
	40°C			55°C			66°C		
	24V	100-265VAC	277VAC	24V	100-265VAC	277VAC	24V	100-265VAC	277VAC
Class I, Div 2, Groups A, B, C, D	T6	T6	T5	T5	T5	T5	T4A	T4A	T5
Class II, Div 1, Groups E, F and G	T6	T6	T5	T6	T6	T5	T6	T6	T5
Class III	T6	T6	T5	T6	T6	T5	T6	T6	T5

HAZARDOUS LOCATION LED WARNING LIGHT (191XL)



SPECIFICATIONS

Lamp Life:	60,000 Hours	60,000 Hours
Light Source:	LED Array	LED Array
Operating Temperature:	-58°F to 150°F	-50°C to 66°C
Net Weight:	4.0 lbs.	1.82 kg
Shipping Weight:	4.25 lbs.	1.93 kg
Height (with Dome Guard):	9.25"	235.0 mm
Diameter:	5.5"	140.0 mm

HOW TO ORDER

- Specify model, mount, voltage, and color
- Optional Accessories:
Hazardous Location Mounting Bracket (LHWB)

REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>	<u>Dome and Ring Assembly</u>	<u>Part Number</u>
LED array, Amber	K147169A-06	Glass Dome/Ring Assembly, Amber ¹	K8449078C-01
LED array, Blue	K147169A-07	Glass Dome/Ring Assembly, Blue ¹	K8449078C-06
LED array, Clear	K147169A-10	Glass Dome/Ring Assembly, Clear ¹	K8449078C-04
LED array, Green	K147169A-08	Glass Dome/Ring Assembly, Green ¹	K8449078C-07
LED array, Red	K147169A-09	Glass Dome/Ring Assembly, Red ¹	K8449078C
		Guard	K8449090B

¹ Assembly includes a gasket

► Model 300GCX

SelecTone® Hazardous Location 15W Amplified Speaker



Model 300GCX SelecTone® Amplified Speaker is designed to produce tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The amplification circuitry, tone module, and gain control are contained in a housing constructed of die-cast aluminum. All surfaces are sealed with powder-coat paint. Dust- and moisture-proof gaskets provide protection from the elements.

SelecTone Amplified Speakers are used individually or as part of a plant-wide emergency notification system. Model UTM Universal Tone Module with 32 tones, or model TM33-SD Custom Tone Module is plugged into a single SelecTone Amplified Speaker for stand-alone use or into a SelecTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is installed into each SelecTone Amplified Speaker and wired to a central controller, SelecTone Command Unit or CommCenter® Digital Message Center. Command Units and CommCenters broadcast tones, voice messages, melodies and live public address to an unlimited number of SelecTone Amplified Speakers.

Applications for SelecTone include emergency warning, evacuation, start/dismissal, public address, and process control signaling.

FEATURES

- Available in 24VAC/DC, 120VAC and 240VAC
- Reliable, solid-state circuitry
- Digital signal amplification
- Fused input and output
- Built-in gain control, adjustable between 0 dBa to 110 dBa @ 10' (0 dBa to 120 dBa @ 1m)
- Cast copper free aluminum housing, spun aluminum projector
- Type 4X, IP66 enclosure
- IP69K compliant
- Indoor/outdoor use
- CSFM Approved
- UL and cUL Listed for Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III

MODEL	VOLTAGE	OPERATING CURRENT	STANDBY CURRENT **	DECIBELS	
				10'	1M
300GCX-024-*	24VDC	0.67 amps	50 mA	110	120
	24VAC 50/60Hz	0.90 amps	100 mA	110	120
300GCX-120-*	120VAC 50/60Hz	0.20 amps	30 mA	110	120
300GCX-240-*	240VAC 50/60Hz	0.10 amps	15 mA	110	120

* Indicates housing color: (-B) for Black housing, leave blank for Gray

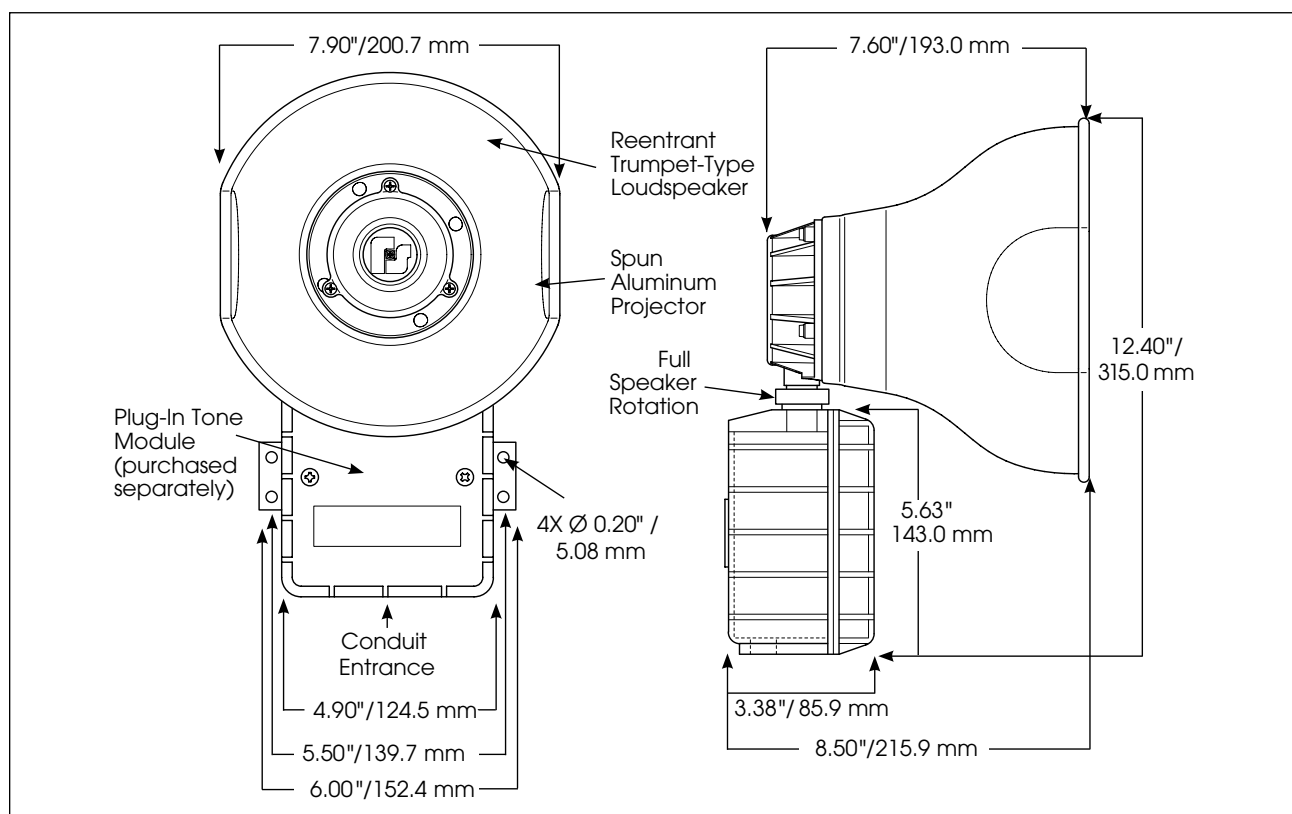
**When used as a powered loud speaker

HAZARDOUS LOCATION RATING: 300GCX

T-CODE AT MAXIMUM AMBIENT TEMPERATURE, °C

Hazardous Location	40°C	66°C
Class I, Division 2, Groups A, B, C, D	T3	T2C
Class II, Division 2, Groups F, G	T6	T6
Class III	T6	T6

SelecTone® Hazardous Location 15W Amplified Speaker (300GCX)



SPECIFICATIONS

Operating Temperature:	-67°F to 150°F	-55°C to 66°C
Rated Power		15 watt
Net Weight:		
24VAC/DC	5.5 lbs	2.5 kg
120/240VAC	5.5 lbs	2.5 kg
Shipping Weight:		
24VAC/DC	6.7 lbs	3.0 kg
120/240VAC	6.7 lbs	3.0 kg
Height:	12.40"	315.0 mm
Width:	7.90"	200.7 mm
Depth:	8.50"	215.9 mm

REPLACEMENT PARTS

Description	Part Number
PCBA, 15W, 24VAC/DC	K2001961B-05
PCBA, 15W, 120/240VAC	K2001961B-04
XFMR, 15W, 120VAC, 1.3 AMP	K120857A
XFMR, 15W, 240VAC, 1.3 AMP	K120858A
Amplifier Assembly, 15W	K2005502A-04
Speaker Assembly, 15W	K8593082A
Voice Coil, 15W	K8593035A
Gasket	K288A043

HOW TO ORDER

300GCX	024	B
TYPE 300GCX	VOLTAGE 024 (24VAC/DC) 120 (120VAC) 240 (240VAC)	HOUSING COLOR B Black BLANK Gray

1. Select Model
2. Select Required Accessory (sold separately)

A. For stand alone operation, select Tone Module:

UTM – Universal Tone Module
(Reference page 215 for list of tones)

TM33-SD – Custom Tone Module
(Reference page 217 for list of tones)

B. For use in systems*, select Connector Kit. (Reference page 218 for Connector Kits)

AM25CK – 25 Vrms, 1 Vrms

AM70CK – 70 Vrms, 1 Vrms

300CK – 10 Vrms, 1 Vrms

T-300CK – 2.7 Vrms, 1 Vrms

E-300CK – 1 Vrms, 1 Vrms

*Call factory for design assistance

MSA GasGard® XL Controller

A reliable partner for hazardous gas monitoring.



Multi-channel, wall-mounted economical controller for all of your gas monitoring needs.

The GasGard XL Controller from MSA is a versatile and easy to use controller for monitoring toxic and combustible gases, and oxygen deficiency. This controller provides protection from potentially hazardous conditions in a variety of industrial, chemical, municipal, and waste water applications. The GasGard XL Controller offers reliability in a compact, durable, wall-mounted housing constructed of fire-retardant ABS plastic. The large and clear multi-language LCD display provides real-time target gas readings and events, offers full system diagnosis, and is supported by individual LEDs per channel with common relays and internal buzzer.

The GasGard XL Controller can be easily configured to accept up to eight remote gas sensors, depending upon the number of individual plug-in input cards installed. With two alarm levels per channel, the GasGard XL Controller operates in conjunction with MSA's remote gas sensors (combustible, toxic, or oxygen 4 –20 mA). Ideal for use with MSA Ultima® X Series Gas Monitors, FlameGard® Flame Detectors, and SafEye™ Open Path Gas Detection Systems, this controller's ergonomic design allows for efficient wiring and installation.

Features and benefits

- Fully configurable via USB or RS485 Modbus connection
- Event log upload through isolated Ethernet RS 485 or USB
- Multi-language display selectable via controller menu
- Expandable up to 8 independent channels using plug-in boards
- Dedicated keys make all functions accessible from the front panel
- Common relay board for Alarm Level 1 and 2, Horn 1 and 2 or Failure
- Large graphic display with intuitive icons; all channels shown at a glance
- Internal buzzer 85 dB

Easy installation

The GasGard XL Controller's efficient and ergonomic design allows for fast and convenient installation.

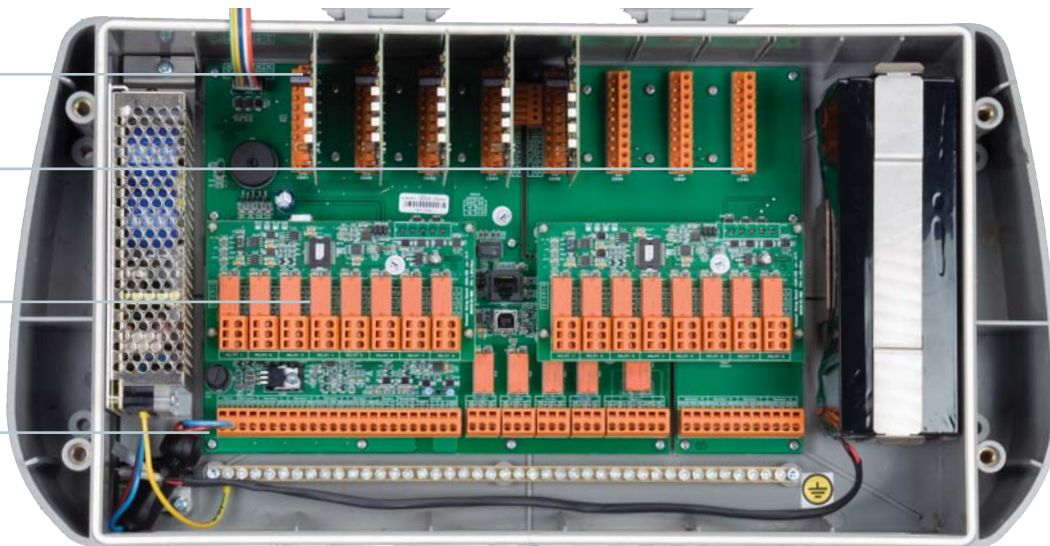
Hot swap channel board

Expandable up to 8 independent channels using plug-in boards

Fail safe pcbs

Optimized inner connection layer

23 pre-formed entries for cabling glands on housing base (cable glands not included)



Specifications

Power supply	85 VAC–256 VAC 50/60 Hz 24 VDC nominal range 18 – 32 VDC
Sensor power supply	18 – 32 VDC
Connection modes	2, 3 wires
Terminal board	Sensor connection for wires up to 2.5 mm ²
Input signals	4 –20 mA
Alarm thresholds	ALARM 1 [Warning] adjustable from 5 to 100% f.s. ALARM 2 [Alarm] adjustable from 5 to 100% f.s.
Electronic speed of responsive	< 1s to reach 100% f.s.
Span/zero drift	< ±0.5% f.s. ±1 digit/month
Accuracy/repeatability	< ±1% f.s. ±1 digit
Operating temperature	–10 °C to +50 °C
Storage temperature	–20 °C to +75 °C
Ambient humidity	95% RH non-condensing
Ingress protection	IP56, NEMA 4X
Dimensions [W x H x D]	20 x 11 x 5 inches
Weight	11 lbs. to 17.6 lbs. (with battery)
Housing material	ABS plastic high resistant fire retardant grade UL-94V-0
Backup battery	2.2 Ah (optional)

Approvals

cCSAus, UL/CSA 61010-1
CSA 22.2 No.152 and ISA 12.13
ATEX 94/9/EC
EN 50270 (EMC)
EN 50402
EN 61010-1 (Low Voltage Directive)
EN 61779-1
EN 61779-4

Accessories

Channel board 4 –20 mA	10081674
Channel relay board	10081677
Sensor extension board for channels 5 – 8	10081676
Back-up battery pack kit	
2.2 Ah with holder and screws	10089924

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



ID 0720-06-MC / Oct 2008

© MSA 2008 Printed in U.S.A.

Corporate Headquarters
P.O. Box 426, Pittsburgh, PA 15230 USA
Phone 412-967-3000

www.MSAnet.com

U.S. Customer Service Center
Phone 1-800-MSA-INST
Fax 1-724-776-3280

MSA Canada
Phone 1-800-672-2222
Fax 1-800-967-0398

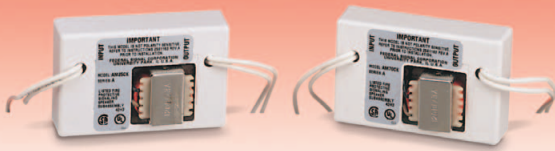
MSA Mexico
Phone (52) 55 2122 5770
Fax (52) 55 5359 4330

MSA International
Phone 412-967-3354
FAX 412-967-3451

MSA
The Safety Company

SelecTone® Connector Kits

Models AM25CK and AM70CK



EXPANDS PUBLIC ADDRESS SYSTEM CAPACITY

- Interfaces SelecTone® speaker/amplifiers with an existing paging system
- Works in 25 or 70 Vrms systems
- Creates a “balanced line” SelecTone® System
- UL and cUL Listed, CSA Certified and CSFM Approved

The Models AM25CK and AM70CK are connector kits which allow the use of SelecTone® speaker/amplifiers (1 Vrms devices) to be used in any public address system (25 or 70 Vrms).

Using these connectors and the 25 Vrms output from the 300VSC-1, 300VSC-1044SB, 300SCW-1 or 300MB SelecTone Command Center creates a true “balanced line” system which will filter all extraneous noise from the audio lines.

Expanding a centrally amplified public address system often requires the addition of another control amplifier. With the appropriate connector kits and SelecTone speaker/amplifiers, the system can easily be expanded, without the costly addition of a central amplifier.

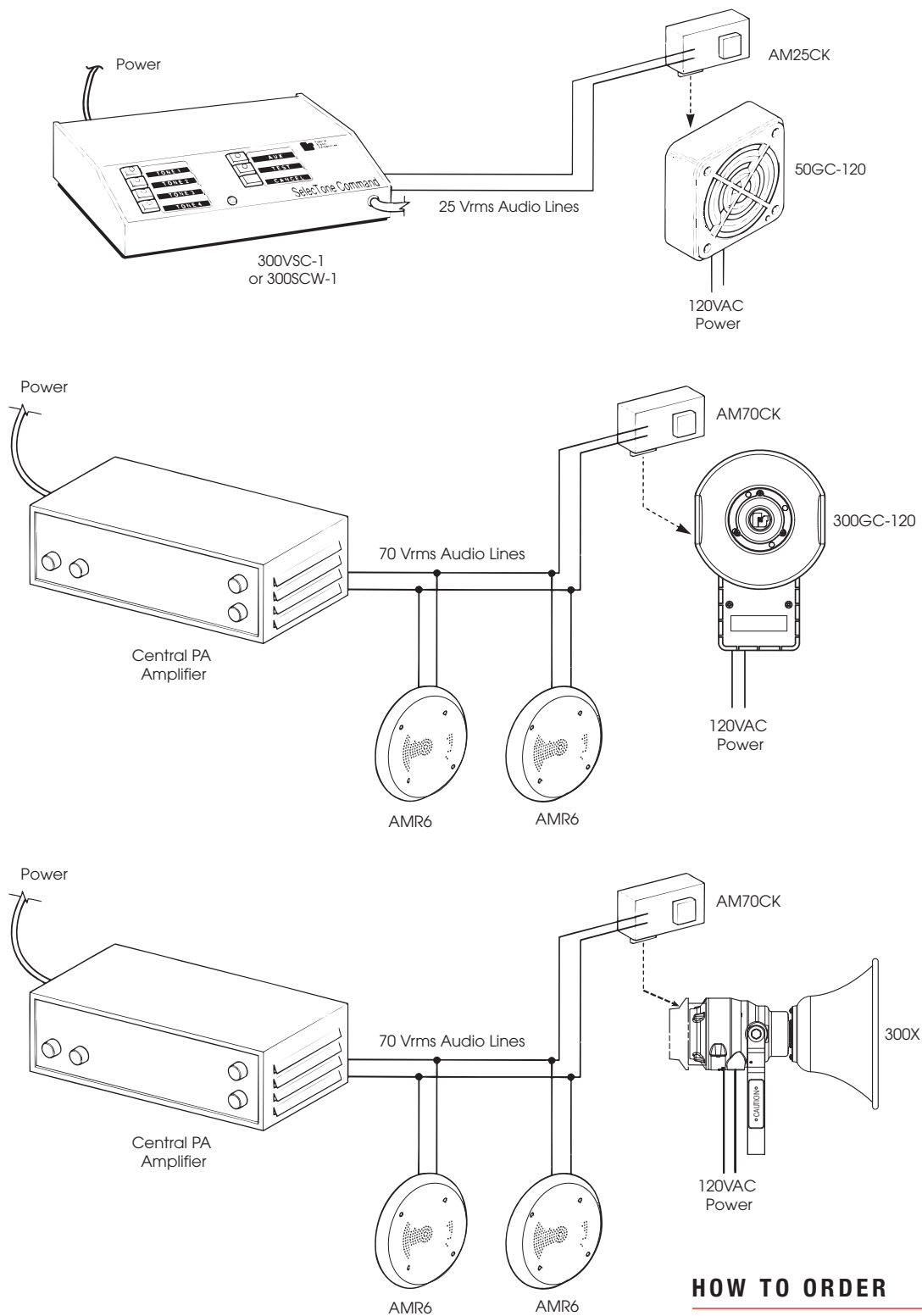
Public address equipment manufacturers do not offer a wide selection of explosion-proof products. Now adding a Class I, Division 1, or Class I, Division 2 device to an existing central PA system is simple; select either a 300X, 300GCX, or 302GCX speaker/amplifier and the appropriate connector kit.

SelecTone typically require a minimum of 18-gauge twisted pair, isolated from the AC line. With an AM series connector kit and the 25 Vrms output of the SelecTone control, a balanced line is created which filters induced line noise. This also allows the installer to use smaller gauge wire without the risk of poor intelligibility.

Federal Signal’s SelecTone Connector Kits allow existing public address systems to be expanded with SelecTone speaker/amplifiers — no additional central amplifier is required.

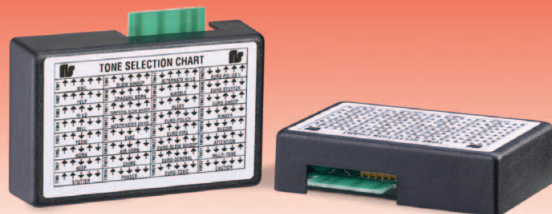


SELECTONE® CONNECTOR KITS (AM25CK/AM70CK)



HOW TO ORDER

- Please refer to Model Number Index AM25CK/AM70CK beginning on page 375



SelecTone® Universal Tone Module

Model UTM

A TONE FOR EVERY SIGNALING NEED

- 32 switchable tones
- Compatible with all SelecTone® equipment
- Plug-in installation
- RFI and EMI shielded
- UL and cUL Listed, CSA Certified and CSFM Approved

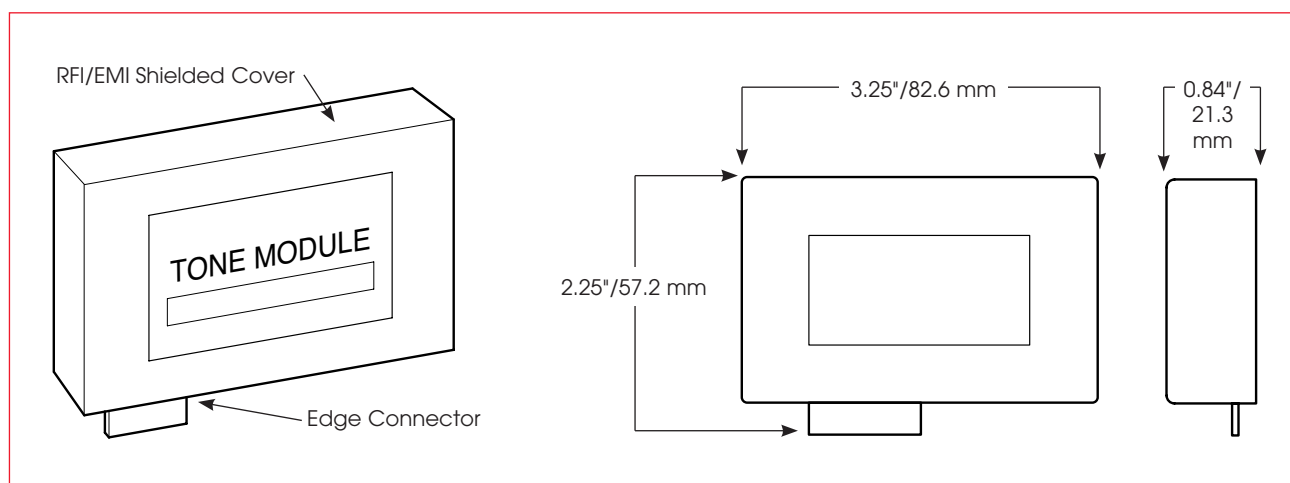
Federal Signal's Universal Tone Module (UTM) is a microcontroller-based tone generator capable of producing 32 different tones. The UTM is the key component of a SelecTone® System or a single SelecTone device. Tone selection is made by setting five DIP switches.

Housed in a plastic cover impregnated with stainless steel fibers, the circuitry is shielded from RFI (radio frequency interference) and EMI (electro-magnetic interference). The edge connector allows for quick and simple installation.

In addition to working with the entire SelecTone® line of speaker/amplifier products, the Model UTM is compatible with the EM3 Extension Module, 300VSC-1 Command Unit, 300VSC-1044SB Command Unit and 300SCW-1 Command Unit. Federal Signal's UTM provides crisp, clear digital signals easily distinguished from the ambient noise of commercial, institutional and industrial environments.



UNIVERSAL TONE MODULE (UTM)



DIP Switch	Tone		Sound	Frequency	Repetition Rate
1 2 3 4 5					
↑ ↑ ↑ ↑ ↑	Wail	TM1	Conventional Siren	560-1055Hz	11 cycles/minute
↑ ↑ ↑ ↑ ↓	Yelp	TM2	Rapid Siren	560-1055Hz	3.3 cycles/second
↑ ↑ ↑ ↓ ↑	Hi-Low	TM3	Alternating Hi and Low	561Hz and 760Hz	50 cycles/minute
↑ ↑ ↑ ↓ ↓	Bell	TM4	Bell, Struck Rapidly	801Hz	50 cycles/minute
↑ ↑ ↓ ↑ ↑	Yeow	TM5	Descending High to Low, Repeated	545Hz and 1296Hz	36 cycles/minute
↑ ↑ ↓ ↑ ↓	Horn	TM6	Steady Horn	470Hz	Continuous
↑ ↑ ↓ ↓ ↑	Beep	TM7	Slow Intermittent Horn	470Hz	50 cycles/minute
↑ ↑ ↓ ↓ ↓	Stutter	TM8	Rapid Intermittent Horn	470Hz	5 cycles/minute
↑ ↓ ↑ ↑ ↑	Slow Whoop	TM9	Slow Ascending Low to High, Repeated	424Hz and 1163Hz	15 cycles/minute
↑ ↓ ↑ ↑ ↓	Gradual Horn	TM10	Steady Horn, Gradually Increasing in Volume	514Hz	Continuous
↑ ↓ ↑ ↓ ↑	Temporal Slow Whoop	TM11	NFPA Coded Slow Whoop	424Hz and 774Hz	15 cycles/minute
↑ ↓ ↑ ↓ ↓	Westminster Chime	TM12	Westminster Chime	Musical Tone	1 cycle/8 tones
↑ ↓ ↓ ↑ ↑	Evac	TM13	Amplitude Modulated Siren	479Hz	4.3 cycles/second
↑ ↓ ↓ ↑ ↓	Air Horn	TM14	Steady Horn	400Hz and 800Hz	Continuous
↑ ↓ ↓ ↓ ↑	Chime	TM15	Single Strike Chime	Musical Tone	49 cycles/minute
↑ ↓ ↓ ↓ ↓	Phaser	TM16	Rapid Siren	600-1200Hz	15 cycles/second
↓ ↑ ↑ ↑ ↑	Alternating Hi/Low	TM17	Alternating High-to-Low	363Hz and 518Hz	60 cycles/minute
↓ ↑ ↑ ↑ ↓	Warble	TM18	Extremely Rapid Siren	560-1055Hz	6.3 cycles/second
↓ ↑ ↑ ↓ ↑	Alert	TM19	Slow Sweep Tone	400-1560Hz	Ascending
↓ ↑ ↑ ↓ ↓	Euro-Police	TM20	Alternating Hi and Low	969Hz and 800Hz	30 cycles/minute
↓ ↑ ↓ ↑ ↑	Euro-Fire	TM21	Sweep Tone	900-800Hz	Continuous
↓ ↑ ↓ ↑ ↓	Euro-Slow Whoop	TM22	Slow Sweep Tone	650-1290Hz	17 cycles/minute
↓ ↑ ↓ ↓ ↑	Euro-General	TM23	Intermittent Horn	969Hz	60 cycles/minute
↓ ↑ ↓ ↓ ↓	Euro-Toxic	TM24	Steady Horn	969Hz	Continuous
↓ ↓ ↑ ↑ ↑	Euro-Police II	TM25	Slow Alternating Hi and Low	554Hz and 440Hz	Alternating Slow
↓ ↓ ↑ ↑ ↓	Euro-Stutter	TM26	Intermittent Beep	2840Hz	252 ms/cycles
↓ ↓ ↑ ↓ ↑	Euro-Sweep	TM27	Sweep Tone	1163 - 397Hz	Descending
↓ ↓ ↑ ↓ ↓	Ringer	TM28	Continuous Ringing Tone	560Hz and 326Hz	Fast Alternating
↓ ↓ ↓ ↑ ↑	Buzzer	TM29	Buzzer Tone	1318Hz and 760Hz	Continuously Alternating
↓ ↓ ↓ ↑ ↓	Attention	TM30	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones
↓ ↓ ↓ ↓ ↑	Multi-Tone	TM31	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones
↓ ↓ ↓ ↓ ↓	Caution	TM32	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones