

# MicroPulse<sub>®</sub> Ultra

Exterior Mount/Perimeter Lights

## FEATURES

- Superior warning with high-powered LEDs
- Low-profile design offers a wider range of mounting locations
- (25) Selectable flash patterns
- Clear and Smoked lens models available
- SpectraLux® multicolor LED technology in combinations of Amber, Blue, Green, Red and White
- FSLink™ allows for synchronization across multiple products
- FSJoin™ enables the synchronization and programming of light bars and exterior/interior lights that works in conjunction with the Pathfinder<sub>☉</sub> Siren
- 12/24 Vdc
- Suitable for external and/or internal mounting applications
- Includes Black bezel and gasket, optional bezels available in Chrome or White
- Single/multi-unit synchronization
- Designed and assembled in University Park, IL USA
- Five-year warranty

## APPROVALS

- IP67 rated, moisture and dust proof
- SAE J845, Class 1 (Amber, Blue, Green, Red, and White)\*
- NFPA 1901\*\*
- CCR Title 13\*\*
- GSA KKK-A-1822\*\*
- R65\*\*

\*SAE J845 for smoked lens models are Class 2 (Blue, Red, and White) \*\*Flash patterns meeting these specs are

noted in the instruction manual

# **FS TECHNOLOGIES**





#### Highly Effective, Ultra Slim Warning Light

MicroPulse® Ultra models have a low-profile design that offers a broader range of mounting options to fit various applications. The advanced high-output LED light head can be programmed to operate as a single unit or synchronize with multiple light heads. Built-in flash patterns enable multiple vehicle perimeter lights to be either synchronized in the same pattern or opposite sequence.



MicroPulse Ultra is only 0.4-inches thick

#### Built to Stand Up to the Most Punishing Conditions

MicroPulse® Ultra lens is made of US resistant polycarbonate to protect against harsh conditions. Models include a fully encapsulated water-proof housing, which provides a barrier against moisture and condensation. All MicroPulse Ultra perimeter lights are backed by Federal Signal's five-year warranty.

#### A Versatile Solution for any Warning Light Application

Suitable for external and/or internal mounting applications, the MicroPulse Ultra comes in many colors, including Amber, Blue, Green, Red and White, in single-, dual-, and tri-color combinations. Models come standard with a Black bezel and are also available with an optional Chrome or White bezel. Models come in a Clear lens, or a Smoked lens option for a more low-profile operation.



MPS6U Smoked Lens Model

#### FSJoin<sub>™</sub> Compatible

MicroPulse Ultra models are FSJoin<sub>™</sub> compatible. FSJoin is a programming compatibility feature of Federal Signal's light bars and exterior/interior warning lights that work in conjunction with the Pathfinder light/siren controller. The combination of FSJoin warning lights and the Pathfinder siren allows the Pathfinder® to control lights around the vehicle by utilizing flash patterns in the siren, syncing/alternating light heads, and dimming light heads. FSJoin compatible products can be programmed through the Convergence Network Configuration Software, simplifying the programming of multiple warning lights and light bars.



#### Compatibility with Older MicroPulse® Ultra Models

- New MicroPulse Ultra models will not synchronize with older MicroPulse Ultra models.
- New MicroPulse Ultra models will synchronize with existing X Series models. This includes MicroPulse Ultra X Series, MicroPulse Wide Angle X Series, 416300 X Series, and 416900/416910 X Series models.

#### FSLink Compatible

MicroPulse Ultra models feature FSLink, a built-in software technology that incorporates a shared set of flash patterns within Federal Signal's LED perimeter lights, interior lights, and beacons. This shared flash pattern software allows the various products to be wired together, set in a common pattern and then synchronized together to flash simultaneously or alternately.

#### Wiring Diagram

FSLink products feature (5) programming wires. Wire functions are consistent across all FSLink products allowing for ease of programming.



LED Color

WIRE	INTERNAL FLASHER MODE
RED	To +Vdc for Mode 1
WHITE	To +Vdc for Mode 2
BROWN	To +Vdc for Mode 3
GREEN	+Vdc for programming sync/FSLink
BLACK	To Chassis Ground



G R W

Lens Color C S

	MPS3U	MPS6U	MPS12U
VOLTAGE		12/24 Vdc	
CURRENT DRAW @12 VDC	0.4 A	0.75 A	1.5 A
CURRENT DRAW @24 VDC, 50% FLASH RATE	0.2 A	0.4 A	0.75 A
OPERATING TEMP.	-40° to +176°F (-40° to +80°C)		
FUSE		2 A	
PHYSICAL SPECIFICATIONS			
LENGTH	3.5 in (8.8 cm)	5.2 in (13.2 cm)	5.3 in (13.5 cm)
WIDTH	0.4 in (1.0 cm)	0.4 in (1.0 cm)	0.4 in (1.0 cm)
HEIGHT	1.3 in (3.3 cm)	1.3 in (3.3 cm)	1.9 in (4.8 cm)
SHIP WEIGHT			
	0.1 lb (0.5 kg)	0.1 lb (0.1 kg)	0.2 lb (0.1 kg)

\* Voltage, Current draw, and Amp draw based on a 50% flash rate for a fully populated light bar



### **Programming Features**

- (3) Programming modes
- (3) Brightness setting (full, dim, and cruise)
- FSLink compatibility to sync products simultaneously or alternately
- Flash color select

MPS3U can operate as a single- or dual-color light

MPS6U/MPS12U can operate as a single-, dual-, or tri-color light

- Color order select
- Split flash select

MPS3U = full flash

MPS6U = full flash and left/right

MPS12U = full flash, left/right, top/down, and criss-cross



MPS123U full flash



MPS123U top-down



MPS123U left/right



MPS123U criss-cross



# HOW TO ORDER

MICROPULSE ULTRA 3, SIN( 12/24 VDC, CLEAR LENS	GLE-COLOR, SURFACE MOUNT,
MPS31U-A	3-LED light head, Amber
MPS31U-B	3-LED light head, Blue
MPS31U-R	3-LED light head, Red
MPS31U-W	3-LED light head, White
MICROPULSE ULTRA 3, DU 12/24 VDC, CLEAR LENS	AL-COLOR, SURFACE MOUNT,
MPS32U-RB	6-LED light head, Red/Blue
MPS32U-BW	6-LED light head, Blue/White
MPS32U-AW	6-LED light head, Amber/White
MPS32U-RW	6-LED light head, Red/White
MPS32U-BA	6-LED light head, Blue/Amber
MPS32U-RA	6-LED light head, Red/Amber
MPS32U-AG	6-LED light head, Amber/Green
MICROPULSE ULTRA 3, DU SURFACE MOUNT, 12/24 VE	AL-COLOR, STEADY BURN, DC, SMOKED LENS
MPS32UX-RB-SMK	6-LED light head, Red/Blue
MPS32UX-BW-SMK	6-LED light head, Blue/White
MPS32UX-RW-SMK	6-LED light head, Red/White
MICROPULSE ULTRA 6, SIN 12/24 VDC, CLEAR LENS	GLE-COLOR, SURFACE MOUNT,
MPS61U-A	6-LED light head, Amber
MPS61U-B	6-LED light head, Blue
MPS61U-R	6-LED light head, Red
MPS61U-W	6-LED light head, White
MICROPULSE ULTRA 6, DU 12/24 VDC, CLEAR LENS	AL-COLOR, SURFACE MOUNT,
MPS62U-AW	12-LED light head, Amber/White
MPS62U-RB	12-LED light head, Red/Blue
MPS62U-BA	12-LED light head, Blue/Amber
MPS62U-BW	12-LED light head, Blue/White
MPS62U-RW	12-LED light head, Red/White
MICROPULSE ULTRA 6, TR 12/24 VDC, CLEAR LENS	I-COLOR, SURFACE MOUNT,
MPS63U-RBW	18-LED light head, Red/Blue/White
MPS63U-BAW	18-LED light head, Blue/Amber/White
MPS63U-RBA	18-LED light head Red/Blue/Amber
MPS63U-RAW	18-LED light head, Red/Amber/White
MPS63U-AGW	18-LED light head, Amber/Green/White

MICROPULSE ULTRA 6, TRI- SURFACE MOUNT, 12/24 VD		
MPS63UX-RBW-SMK	18-LED light head, Red/Blue/White	
MICROPLULSE ULTRA 6, TR 12/24 VDC, CLEAR LENS, 8-	I-COLOR, SURFACE MOUNT, -FT, (243.8 CM) CABLE	
MPS63U-8FT-RBW	18-LED light head, Red/Blue/White	
MICROPULSE ULTRA 12, SIN 12/24 VDC, CLEAR LENS	GLE-COLOR, SURFACE MOUNT,	
MPS121U-A	12-LED light head, Amber	
MPS121U-R	12-LED light head, Red	
MICROPULSE ULTRA 12, DU 12/24 VDC, CLEAR LENS	AL-COLOR, SURFACE MOUNT,	
MPS122U-BW	24-LED light head, Blue/White	
MPS122U-AW	24-LED light head, Amber/White	
MPS122U-RW	24-LED light head, Red/White	
MPS122U-RB	24-LED light head, Red/Blue	
MICROPULSE ULTRA 12, TR 12/24 VDC, CLEAR LENS	I-COLOR, SURFACE MOUNT,	
MPS123U-RBW	36-LED light head, Red/Blue/White	
MPS123U-BAW	36-LED light head, Blue/Amber/White	
MICROPULSE ULTRA 12, TRI-COLOR, STEADY BURN, SURFACE MOUNT, 12/24 VDC, SMOKED LENS		
MPS123UX-RBW-SMK	36-LED light head, Red/Blue/White	
ACCESSORIES		
MPSUMB3-1	Chrome bezel for (1) MicroPulse Ultra 3	
MPSUMB3-2	White bezel for (1) MicroPulse Ultra 3	
MPSUMB6-1	Chrome bezel for (1) MicroPulse Ultra 6	
MPSUMB6-2	White bezel for (1) MicroPulse Ultra 6	
MPSUMB12-1	Chrome bezel for (1) MicroPulse Ultra 12	
MPSUMB12-2	White bezel for (1) MicroPulse Ultra 12	



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