Meshguard System Alarm Bars and Solar Battery Solution

Wireless Alarm Bar

The Wireless Alarm Bar communicates with the MeshGuard product family network. Each alarm bar comes with a pair of xenon strobe lights and a 112 dB horn to provide remote notifications of hazards in a work environment. A Wireless Alarm Bar can be configured as a Remote device that connects to the FMC 2000 controller.
When configured as a Remote device, the alarm bar will mirror the alarm settings in the controller. When the Wireless Alarm Bar is configured as a Host device, it becomes a stand-alone alert notification system that communicates directly with the remote monitors in a Mesh network.

Applications:

• Oil and gas exploration

• Pulp and paper industry

• Refineries and petrochemical plants

• Fenceline monitoring

• Wirelessly triggers alarm notification in hazardous environments

• Hazardous area certification

• Functions as a wireless router, extending the range of a wireless mesh network

• Can act as a wireless system host by communicating directly with MeshGuard gas monitors

KEY FEATURES

• Turn-key wireless alarm bar solution, mounted and pre-wired with two xenon lights and a 112dB horn

• Wireless transmission distance of 1,000 ft (300m) point-to-point. Range can be extended by using additional RAEPoint Wireless Relays

• Continuously powered by standard 12-28VDC input (DC version) or 110 AC (AC version)

• Explosion-proof enclosure for hazardous environment applications

• Battery driven option

Technical Specifications

DC WIRELESS ALARM BAR SPECIFICATIONS	
INPUT POWER	Input 24 to 28VDC, 35W Max
WIRELESS	ISM-band, IEEE 802.15.4 / Mesh Radio
TRANSMISSION RANGE	1,000 ft (300m) typical
IP RATING	IP-65
MECHANICAL INTERFACE	1/2" NPT Male
INSTALLATION	Wall mounting
TEMPERATURE	(-20° C to +50° C) (Certified)
HUMIDITY	0 to 95% relative humidity, non-condensing
PRESSURE	90 to 110kPa
STATUS INDICATOR	4 LEDs (Network, Alarm, Communication, Mode)
DIMENSIONS	17.95" L x 18.75" W x 6.9" H (456 x 476 x 173 mm)
HOUSING MATERIAL	Aluminum
WEIGHT	26.5 lbs (12 kg)
SAFETY COMPLIANCE	Ex II 2G, Ex d ia IIC T6 Gb Class I, Division 2 Group A,B,C,D
WIRELESS CERTIFICATION	FCC Part 15 Radio Equipment Directive 2014/53/EU (RED) (Contact RAE Systems for other countries)
STROBES	Two 10 Joule xenon strobes (yellow & red) Peak Intensity 19103 Cd (yellow), 3332 Cd (red) Material LM25 TF Marine-grade alloy
SOUNDER	112 dBA at 3 ft (1 m) Material Marine grade aluminium Al Si12 Cu

AC WIRELESS ALARM BAR SPECIFICATIONS	
INPUT POWER	Input 110 VAC 60 HZ, 35W Max
WIRELESS	2.4 GHz, ISM-band, IEEE 802.15.4 / Mesh Radio
TRANSMISSION RANGE	1,000 ft (300m) typical
IP RATING	IP-65
MECHANICAL INTERFACE	1/2" NPT Male
INSTALLATION	2" pipe-holding or wall mounting
TEMPERATURE	-4° F to 104° F (-20° C to +40° C) (Certified)
HUMIDITY	0 to 95% relative humidity, non-condensing
PRESSURE	90 to 110kPa
STATUS INDICATOR	4 LEDs (Network, Alarm, Communication, Mode)
DIMENSIONS	17.95" L x 18.75" W x 6.9" H (456 x 476 x 173 mm)
HOUSING MATERIAL	Aluminum
WEIGHT	26.5 lbs (12 kg)
SAFETY COMPLIANCE	Class I, Division 2 Group A,B,C,D
WIRELESS CERTIFICATION	FCC Part 15 Radio Equipment Directive 2014/53/EU (RED) (Contact RAE Systems for other countries)
STROBES	Two 10 Joule xenon strobes (yellow & red) Peak Intensity: 3840,800 Cd (yellow), 62,400 Cd (red)
SOUNDER	112dBA at 3 ft (1 m) Material: Marine grade aluminium Al Si12 Cu

ORDERING OPTIONS

Can be ordered as a Remote or Host (reconfigurable).

Configuration as AC- or DC-powered.

ORDERING INFORMATION

All Wireless Alarm Bar units include: RAEPoint Fixed Wireless Relay (with five internal relays), red xenon light, yellow xenon light, 112dBA horn, mounting plate, antenna removal tool, housing cover removal tool, user's guide.

F08-E011-020 KIT, AC Wireless Alarm Bar, Remote, 2.4GHz

F08-E011-010 KIT, DC Wireless Alarm Bar, Remote, 2.4GHz

FA300/FA324 Alarm Bar

The FA300 Alarm Bar communicates directly with the controller using a permanently affixed cable with 6-pin male connector. The FA324 Alarm Bar communicates directly with TPPLW using a permanently fixed cable with 6-pin male connector. Each FA300/FA324 comes with four xenon strobe lights and one 117dB horn. The FA300 is continuously powered by the controller.

FA300/FA324 ALARM BAR SPECIFICATIONS	
Size	9.45" x 26.98" x 8.52" (66 cm x 24 cm x 31.65 cm), including siren horn
Weight	16.35 lbs (7.42 kg), including cable
Enclosure material	Stainless steel light bases with polycarbonate lens covers; ABS siren horn
Audible alarm	117dB @ 3 m (10")
Visual alarms	Four super-bright xenon strobe lights with polycarbonate lens covers (red, white, blue, amber)
Flash rate	1 flash per second
Primary Input	Permanently affixed cable with 6-pin male connector
Secondary Input	6-pin male connector
Cable Length	33' (10 m)
Power Supply	FA300 is powered by 12-volt 2A outputs from FMC 2000 FA324 is powered by 24-volt 2A outputs from TPPLW
Operating Temperature	-13° F to +131° F (-25° C to +55° C)

ORDERING INFORMATION

F05-E030-000 FA300 Alarm Bar with 4 Visible and One Audio Alarm.

F05-E030-024 FA324 Alarm Bar with 4 Visible and One Audio Alarm 24 Volt DC for use with TPPLW.

WA100 Alarm Bar

The WA100 Alarm Bar communicates with the MeshGuard family network. Each WA100 comes with one xenon strobe light and one 117 dB horn. The WA100 is powered by an external DC power supply using the insulated battery terminal clips.

WA100 ALARM BAR SPECIFICATIONS	
Size	9.45" x 20.86" x 8.3" (53 cm x 24 cm x 21.1 cm), including siren horn
Weight	16.35 lbs (7.42 kg), including cable
Enclosure material	Stainless steel light bases with polycarbonate lens covers; ABS siren horn
Audible alarm	117dB @ 3 m (10")
Visual alarms	One super-bright xenon strobe lights with polycarbonate lens covers (red, white, blue, amber)
Flash rate	1 flash per second
Cable Length	16' (5 m)
Power Supply	Powered by 12-volt 2A
Operating Temperature	-4° F to +131° F (-20° C to +55° C)
Wireless Certification	FCC Part 15 Radio Equipment Directive 2014/53/EU (RED) (Contact RAE Systems for other countries)

FTB100 Solar Battery Solution

The FTB100 Solar Battery Solution is compatible with the DC Wireless Alarm Bar and can be used to continuously power the Wireless Alarm Bar by charging the external battery pack using a solar panel.

FTB 100 SPECIFICATIONS	
Size	19.68" x 11" x 8.63" (50cm x 28cm x 22cm)
Weight	47.4 lbs (cabinet) 14.2 lbs (solar panel)
Enclosure material	Heavy Gauge lightweight aluminum construction
Solar Panel	40 Watts
Power Supply	Sealed 12V 36A Gel Battery
Safety Compliance	Class 1 Division 2 Group A,B,C,D
Operating Temperature	-4° F to +120° F (-20° C to +50° C)

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