

RadioSounder

RS-S1F Series

PRODUCT OVERVIEW

The RadioSounder from Mimes gives the power of IoT to the field sounders, enabling sounder to only require local power. This gives you SIL capable sounders with no IO restrictions. Cyber security designed in from the core with 128-bit AES encryption. The RS-S1F is a high output, 115dB(A) wireless alarm horn sounder with a re-entrant flare horn. The robust IP66 corrosion proof 316L stainless steel enclosure ensures suitability for all Zone 1, 2, 21 & 22.

Featuring 64 first stage/channel alarm sounds which can be selected via an internal switch. The alarm tone frequencies for the first 2 stages are independently selectable. Each tone can be remotely triggered e.g. via second wireless relay for second or third alarm sound. The enclosure features a threaded flame path, double cable entries, extended antenna and a large termination area – all of which significantly reduce installation time. SIL1/2 IEC 2010) 61508).



 **ISA100**Wireless

APPROVALS

IEC
IECEX ULD 16.0017X
IEC 60079 - 0:2011
IEC 60079 - 1:2014
IEC 60079 - 31:2013
TR-CU Ex EAC certificate: RU C-GB. AA71.B.00109
SIL1 compliant to IEC 61508 (2010)
ATEX
ATEX DEMKO 16 ATEX 1466X
EN 60079 - 0:2012 + A11 : 2013

CODING

Sounder:

IECEX / ATEX

II 2G Ex db IIC Gb T6 Ta -50°C to +65°C
II 2G Ex db IIC Gb T5 Ta -50°C to +70°C
II 2D Ex tb IIIC Db T85°C Ta -50°C to +70°C

Antenna:

Ex eb IIC T4 Gb T.amb -20°C til +70°C

FEATURE	BENEFIT
Universal usage globally ISA100 industrial communication	Guaranteed interoperability with other vendor's field instruments and infrastructure
Line powered product	Excellent addition to wireless infrastructure, enhanced redundancy with no impact on battery budget
Router and I/O device roles	Flexible devices that can act as I/O or router and in I/O and router role. Network topologies star, mesh and combination
The first wireless sounder on the market, Exd certified and SIL capable.	Can be connected to 24v power and activated via your ISA100 network
Bluetooth or over the air configuration	Fast and flexible provisioning of equipment. Efficient software and configuration upgrades
The RadioSounder gives ISA100.11a communication with SIL capabilities	Can be used directly with any site that has ISA100 industrial network installed. Communication from wireless gateway can be Modbus or Profinet/Profisafe
Corrosion proof 316L stainless steel enclosure	Full environmental protection
High output, up to 123dB(A)	Optimal coverage and range
Choice of 64 alarm tone frequencies	For optimal alarming flexibility
Covers all applications from Industry, windfarms to oil fields	Tested towards industrial standards
Ex e antenna	Easy customizable antenna solutions suitable for any applications

PARTCODES

Version:	Partcode:	
Product type:	RS	
Horn type:	S1F	Flare re-entrant horn
Safety:	I	Industrial/standard
	S1	SIL1
	S2	SIL2
Enclosure:	E01	GRP
	E02	Stainless Steel
	E02	Aluminium
Plug material:	N	Nickel Plated
	S	Stainless Steel
Equipment tag:	1	Label tag
	2	SS Equipment tag
Enclosure colour:	R	Red
	S	Special
Accessories:	SP65-0001-A4 Pole Mount Bracket Kit 2» St/St A4 (316) SP65-0003-A4 Sunshade – St/St A4 (316)	

NETWORK AND COMMUNICATIONS

ISA 100.11a	ISM 2475 – 2400 MHz
Encryption	128 - Bit AES
Network modes	STAR/MESH/STARMESH
Latency	10 msec to 1 minute
Line of sight RF range	EX 500m and Non Ex 2000m
Antenna:	Omnidirectional antenna with 2.4 GHZ, band
Configuration and software	Bluetooth v4.2 or serial port
Communication	ISA100, ProfiSafe,
External communication	Modbus, OPC UA, ProfiNet/Safe
Gateway dependent	

SPECIFICATION

Maximum output: 115dB(A) @ 1 m +/- 3dB [106dB(A) @ 10ft/3m +/- 3dB]
Nominal output: 110dB(A) @ 1m +/- 3dB [101dB(A) @ 10ft/3m] +/- 3dB
No. of tones: 64 (UKOOA / PFEER compliant)
No. of stages: 2
Volume control: Full range
DC: 24v dc (12-30v dc)
Protection: EN60529: IP66
Enclosure material: 316L Stainless Steel
Enclosure finish: Chromated & powder coated
Colour: Red (RAL3000)
Cable entries: 2 x M20 x 1.5mm
Terminals: 0.5-2.5 mm ² (20-14 AWG)
Enclosure volume: <2 litres
Wireless interface: ISA100.11a
Grounding stud: M5
Operating temp: -20°C to +70°C [-0°F to +158°F]
Relative humidity: 95% – Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
Weight: 6.95kg/15.40lbs

CURRENT CONSUMPTION

Nominal Voltage:	Voltage Range:	Nominal Current:	Max. Current:	In -rush:
24Vdc	11.5-54Vdc	185mA	221mA	815mA <4ms

