

Mimes Gateway

WFNM Series

PRODUCT OVERVIEW

Mimes Wireless Field Network Manager (WFNM) is an ISA100 Wireless (IEC62734) compliant Gateway. It provides wireless connectivity, network and security management to ISA100 Wireless mesh field instrument networks. It is suitable for installations in control rooms or cabinets for communication with any ISA100 compliant field devices. Antenna and housing alternatives for hazardous area installation is available. The ISA100 Wireless (IEC 62734) industrial IoT standard provides a robust wireless protocol for the full range of process measurement, control, safety and asset management applications. Monitor, configure and manage field instruments via an intuitive web-based application and access both process values and diagnostics through MODBUS/TCP, OPC UA and GSAP/GCI plant network interfaces.



APPROVALS

FCC/ISED Part 15.247, 15.407

ETSI EN 300 328 V2.2.2 (2019-07)
per RED 2014/53/EU

STANDARDS

IEC 62734

EN 301 489-1 V2.1.1

EN 301 489-17 V3.1.1

Emissions per EN5503

IEC 61000-4-2 level 4 ESD
immunity IEC 61000-4-3 - RFI

EMC Immunity per EN 61000-6-2
and EN 61000-6-4

Compliant to directive 2015/863/
EU - RoHS 3

FEATURES

- Wireless Field Connectivity
- Highly Scalable ISA100 Wireless deployments
- Mesh Networking Rules
- Optional PROFINET interface enables tunnelling of PROFI-safe for use in SIL systems
- Encrypted wireless communication
- MODBUS/TCP, PROFINET, OPC UA and GSAP/GCI Plant Connectivity

BENEFITS

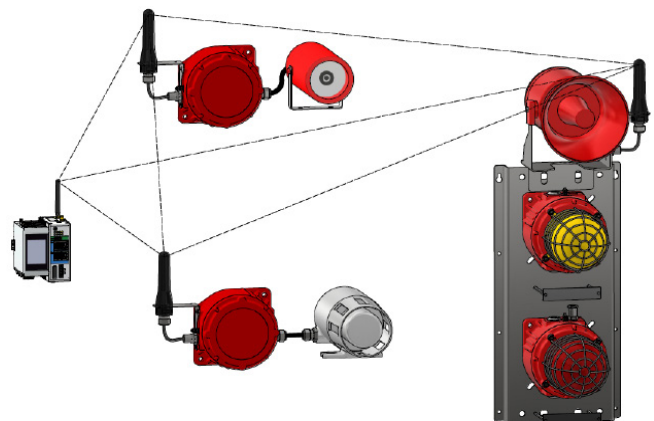
- Provides wireless field connectivity
- Remote antenna options
- Up to 200 field instruments per Gateway
- Secure encrypted and authenticated process.

TYPICAL APPLICATIONS

- Petrochemical
- O&G onshore and offshore
- Marine applications
- Industrial applications
- Offshore wind



Mimes Gateway in Mimes enclosure with external antenna.



Using Mimes Gateway with different field devices in a wireless ISA100 network.

PARTCODES

VERSION: **PART CODE:**

Product type	WFNM	Wireless Field Network Manager
Model	LBA LA	Supports up to 50 field devices Supports up to 200 field devices
PROFINET	P	PROFINET Interface
Antenna	SMA External	SMA female Contact Cable length up to 10m (EX)
Standard versions	up to 50* Up to 200*	WFNM-LBA-ISA WFNM-LA-ISA

*numbers of field instruments must be calculated to ensure right capacity, the numbers of field instruments can be less than stated.

SPECIFICATIONS

DC: 24v dc (20-30v dc)

Installation: DIN rail or wall mount

Dimensions:

46,2mm x 100mm x 120mm

Operating Temp:

-20°C to +70°C [-4°F to 158°F]

Humidity:

10% to 95%, Non condensing

Net Weight: 1.8 kg

Enclosure Material: Aluminium

Enclosure Colour: Natural

ISA100.11a:

Frequency: 2400-2475MHz

Latency: Configurable, 500 ms to 24h

Data Rate: 250 kbps

Spred Spectrum: DSSS

RF Output Power: Max +16 dBm

Communication Range: 500 meters

Antenna Contact: SMA female

Mesh Network Depth:

Configurable up to 3 hops

NETWORK AND COMMUNICATIONS

Wireless Communication	Standard IEEE 802.15.4
Communication Range	500 meters
Antenna Connection	SMA female

Scalability for Publish Rates Supported

	Publish Rate	Numbers of Field Instruments
Numbers of field instruments must be calculated to ensure right capacity, the numbers of field instruments can be less than stated.	0.5 seconds	25 field instruments
	1 second	50 field instruments
	2 seconds	100 field instruments
	5 seconds	150 field instruments
	10s, 15s, 20s, 1m, 30m, 60m	200 field instruments

