

RadioHub Extended I/O

RH-L-AI/AO/R Series

PRODUCT OVERVIEW

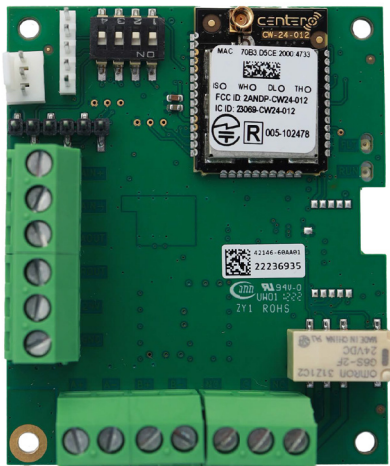
The RadioHub Extended I/O from Mimes provides the possibility to transform wired equipment to wireless IoT for both standard and SIL2 applications.

The wireless link is based on ISA100 with both safety and cybersecurity in mind with Profisafe and 128bit AES encryption.

All equipment providing an analogue input or analogue output interface can be converted to wireless access.

It is also possible to control equipment using a monitored relay output available via the same wireless communication link.

This makes the RadioHub Extended I/O very flexible for most applications with new or existing equipment where wireless signalling is needed.



APPROVALS

SIL2 compliant to IEC 61508 (2010)

STANDARDS

IEC 61326-1

IEC 61000-6-7

IEC 61000-1-2

EU RED art. 3.1a / 3.1b / 3.2

ETSI EN 301 489-1 / 301 489-17

ETSI EN 300 328

FEATURE	BENEFIT
<ul style="list-style-type: none"> Universal usage globally with the use of ISA100 industrial communication 	<p>Guaranteed interoperability with other vendor's field instruments and infrastructure</p>
<ul style="list-style-type: none"> Router and I/O device roles 	<p>Flexible devices that can act as I/O or router and in I/O and router role. Network topologies star, mesh and combination</p>
<ul style="list-style-type: none"> Bluetooth or over the air configuration and software upgrades 	<p>Fast and flexible provisioning of equipment. Efficient software and configuration upgrades</p>
<ul style="list-style-type: none"> The first SIL2 wireless universal I/O on the market 	<p>Wireless safety extender for existing or new installations of field devices</p>
<ul style="list-style-type: none"> Additional 2 LED options and 1 open collector outputs for custom indication and controlling of for instance external relay 	<p>Wide range of applications can be addressed with built in capabilities</p>
<ul style="list-style-type: none"> Flexible integration with existing ISA100 networks 	<p>Can be used directly with any site that has ISA100 industrial network installed</p>
<ul style="list-style-type: none"> Option with PC/GRP/ ALU and SS enclosures 	<p>Can be installed in standard Exd enclosures</p>
<ul style="list-style-type: none"> The RadioHub gives ISA100.11a communication with SIL2 and cybersecurity 	<p>Wireless SIL2 ProfiSafe communication with 128 bit AES encryption</p>
<ul style="list-style-type: none"> Covers all applications from Industry, windfarms to oil fields 	<p>Tested towards industrial standards</p>
<ul style="list-style-type: none"> Modular design from concept 	<p>Gives flexibility to expand and add I/O and communication protocols</p>



PARTCODES

Version:	Partcode:	
Product type:	RH-L-S-AI/AO/R	SIL2
	RH-L- AI/AO/R	Standard
Terminals:		2.5mm²

SPECIFICATION

DC:

24 Vdc (20-30 Vdc)

Power consumption:

10mA, 24Vdc

Input:

4-20mA (0-25mA)

3 wire and 4 wire configurations (sink and source)

Output:

30 Vdc 2A Relay

0-25mA Analogue output

1 x Open collector 80mA

Option 2 LED indication possible

Wireless interface:

ISA100.11a

Wiring:

12-20AWG (2.5-0.35mm²)

Operating temp:

-40°C to +70°C [-58°F to +158°F]

Dimensions:

70 x 58 x 23

Humidity:

95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist

Net Weight:

45 g

NETWORK AND COMMUNICATIONS

ISA 100.11a	ISM 2475 - 2400 MHz
Encryption	128 - Bit AES
Network modes	STAR/MESH/STARMESH
Wireless Latency	Configurable, 500 msec to 1 minute
Line of sight RF range	EX 500m and Non Ex 2000m
Antenna connection	MMCX
Configuration and software	Bluetooth v4.2 or serial port
Communication	ISA100, ProfiSafe, HART
External communication	Modbus, OPC UA, ProfiNet/Safe

(Gateway dependent)

