sigfox

LoRa

EXTERNAL ANTENNA AN-E

- In conjunction with the output contact of the respective monitoring relay, it serves to monitor voltage, current or levels.
- Using a universal feature provides a quick solution to keep track of the current status of the supervised equipment or technology unit and eliminates the financial loss caused by the malfunction of the device
- Communication on the Sigfox or LoRa network.
- Data is sent to the server from which it can be subsequently displayed as a smartphone, application, or Cloud notification.
- Li-Ion battery pack for 24 hour backup.
- The package includes an internal antenna AN-I , in case of locating the converter in a metal switchboard, you can use the external antenna AN-E for better signal reception.
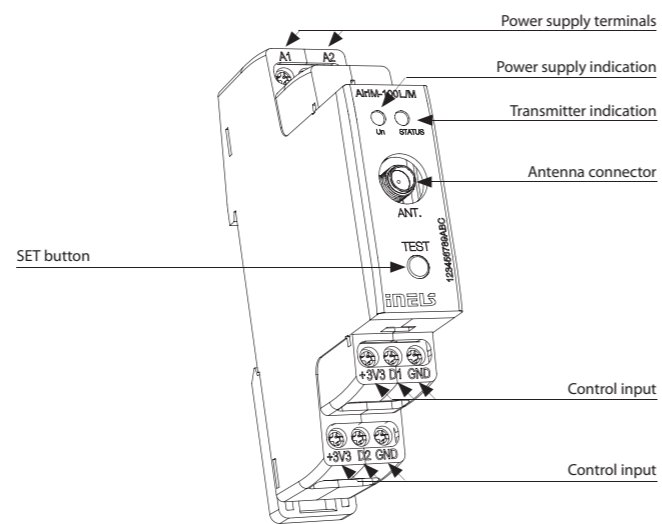- 1-MODULE, DIN rail mounting.

Technical parameters	AirIM-100S/M		AirIM-100L/M	
Supply voltage:	85 - 230 V AC (50 - 60 Hz)	12 - 48 V DC	85 - 230 V AC (50 - 60 Hz)	12 - 48 V DC
Supply voltage tolerance:	+10 % / -25 %			
Input:	3 VA			
Backup power:	battery Li-Ion			
Battery life:	24 hour			
Battery charging:	7 hour			
Setting				
Setting:	With a message from the server / button SET			
Alarm Detection:	message to the server			
Battery status view:	only when the battery is powered by a message on the server			
Indication				
- red LED:	broadcast / D1			
- green LED:	power supply / D2			
- without indication:	Backup battery power / no power			
Input				
Digital input:	D1, D2			
Supported sensors for energy measurements:	LS (LED sensor)* MS, WS (magnetic sensor)* SO (Contact, open collector)			
Communication				
Protocol:	Sigfox		LoRa	
Transmitter frequency:	RCZ1 868 MHz		868 MHz	
Range in open space:	Approx. 50 km**		Approx. 10 km**	
Transmission power (max.):	25 mW / 14 dBm		25 mW / 14 dBm	
Other parameters				
Working temperature:	-20 ... + 50 °C			
Operation position:	any			
Mounting:	DIN rail EN 60715			
Protection degree:	IP20 from the front panel			
Overvoltage category:	III.			
Pollution degree:	2			
Max. cable size (mm²):	max. 1x 2.5, max. 2x 1.5 / with a hollow max. 1x 2.5			
Connection of the sensor:	terminals, wires 0.5 - 1 mm²			
Output for antenna:	SMA connector ***			
Dimension:	90 x 17.6 x 64 mm			
Weight:	93 g			

* Not included in the package.
** Depending on network coverage.
*** Max Tightening Torque for antenna connector is 0.56 Nm.

Device description

Power supply terminals
Power supply indication
Transmitter indication
Antenna connector
SET button
Control input
Control input

Accesories

A summary and overview of all types of monitoring relays can be found in the technical catalogue **Modular electronic devices**:
https://www.elkoep.com/catalogs-and-brochures

Function

1. **S0** - pulse counting S0
   - For each channel, a different function can be set independently.
   - Recommended accessories: cable for S0 output

2. **Energy measurement** - pulse counting from active sensor LS, MS, WS
   - For each channel, a different function can be set independently.
   - Recommended accessories
     - LS (LED sensor): is particularly suitable for power meters that support LED pulse sensing
     - MS (magnetic sensor): is particularly suitable for gas meters that support magnetic sensing.
     - WS (magnetic sensor for water meter): it is particularly suitable for water meters that support magnetic sensing.

3. **Flood Detection** - Flood Sensor
   Recommended accessories: flood sensor FP-1

4. **HTM2500LF** - Temperature and Humidity Sensor Measurement HTM2500LF
   Recommended accessories: HTM2500LF sensor

5. **Alarm function** - check the contact - switch
   - For each channel, a different function can be set independently.

6. **Alarm function** - check the contact - switch
   - For each channel, a different function can be set independently.

7. **NC function** - this function must be set on an unallocated channel (if only one channel is connected).
   - For each channel, a different function can be set independently.