

# LANSEN

## Outdoor temperature and humidity sensor

### DEVICE

The outdoor ambient temperature and humidity device from Lansen is a plug-and-play temperature and humidity transmitter. The device is made of highly durable PC plastic with highest accuracy on-board temperature and humidity sensor.

### PERFORMANCE

The internal radio antenna is optimized for 868Mhz and is tuned for mounting on concrete, wood or plaster. Each device has two antennas one in each direction to maximize the range between the meter and the collectors. The battery level is continuously monitored and a low level warning is issued when battery is nearing depletion. The sensor is not designed for operating in constant freezing temperature.

### FIRMWARE

MODES	MIOTY ETSI TS-103-357
INTERVAL	15 min. Can be ordered with custom interval (60s - 1hr)
SAMPLE INTERVAL	5 minutes humidity and temperature
ENCRYPTION	AES128 encryption Can be ordered with custom configuration.
<u>STANDARD</u>	MIOTY ETSI TS-103-357, 90 seconds. Encryption ON.

### SENSORS

TEMPERATURE	RANGE: -40° to +85°, 0-100 %RH
TYP ACC:	±0,2° at 0° to +85° ±0,3° at -40° to +85°
HUMIDITY	TYP ACC: ±2 %RH Even better acc. on request.

### WARNINGS

BATTERY	Low battery
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### POWER/LIFETIME

POWER SUPPLY	ER17505 3.6V Li-SOCI2 battery
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years typical, standard configuration and operating temperature.
RADIO	16 dBm output power to 2 differential antennas
BATTERY	Soldered. Can be ordered with battery holder.

### GENERAL INFORMATION

STANDARDS	2014/53/EU (RED) MIOTY ETSI TS-103-357
MATERIAL	Signal white PC UV stabilized plastic
SIZE (W x H x D)	95 x 65 x 55 mm
IP	65

### OPERATING CONDITIONS

RADIO TRANSMITTER	Max: -30° to + 85° Recomended -20° to +50°
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### DEVICES

LAN-MIOTY-O-TH	Outdoor temperature and humidity transmitter
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### TEMPERATURE SENSOR

The on-board temperature sensor is highly accurate with typical accuracy  $\pm 0,2^\circ$ .

### HUMIDITY SENSOR

The on-board humidity sensor is highly accurate in the entire temperature range, with typical accuracy  $\pm 2\%RH$ .

### MEASUREMENTS

Temperature and humidity is sent at a preconfigured interval and the data is sent using the MIOTY protocol. This makes the sensor ideal for integration in data collecting systems. The MIOTY data contains current, average hourly and average 24 hours data.

### INSTALLATION

The device is waterproof and resistant to raining water thanks to a membrane at the bottom of the device. The device should, if possible, still be mounted protected from rain and sunlight. The device is started using a simple magnet so the enclosure does not need to be opened.

