LANSEN

LAN-MIOTY-O-TH-H

Harsh temperature and humidity sensor

DEVICE
The harsh/freezer ambient temperature and humidity device from Lansen is a plug-and-play transmitter optimized for constant operation in really low temperature. 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.

FIRMWARE

MODES	mioty ETSI TS-103-357
ENCRYPTION	Network: AES128 encryption

INTERVAL

SAMPLE	TBD
TRANSMISSION	TBD

MIOTY DATA

TEMPERATURE	Current, 15 min ago, avg. last 30 min, avg. 31-60 min
HUMIDITY	Current, 15 min ago, avg. last 30 min, avg. 31-60 min
BATTERY	Current battery voltage Low battery warning (2.6V)
OPERATING	Total operating time (years)
NOT ACTIVATED	If device has not been activated yet.

POWER/LIFETIME

POWER SUPPLY	3.6V Li-SOCl2, ER17505 soldered battery (optional battery holder)
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years expected*, standard configuration and recommended operating temperature
RADIO	16 dBm (25mW) output power to antennas ERP typical up to: 12.4 dBm (17.4 mW)
ANTENNAS	2 antennas for true differential transmission

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	66

OPERATING CONDITIONS

RADIO TRANSMITTER	Max: -35^0 to + 85^0. Recommended -30^0 to +50^0

DEVICES

LAN-MIOTY-O-TH-H	Harsh outdoor temperature and humidity transmitter

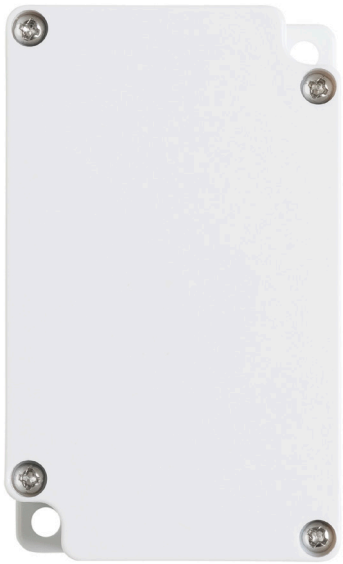
TEMPERATURE SENSOR
The on-board temperature sensor is highly accurate with typical accuracy as below.

- ±0.2°C at -40°C to +85°C
- ±0.3°C at -40°C to +85°C

HUMIDITY SENSOR
The on-board humidity sensor is highly accurate in the entire temperature range, with typical accuracy ±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 last 30 min, average last 31-60 min, and more.

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.



mioty

*The expected battery lifetime stated is based on simulations and true measurements at 25 C° and is valid to the best of our ability but not a guarantee. The calculations and measurements can be sent upon request for your reference.

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