LoRa HAN Interface

LHi110 transports data from electricity meters equipped with a "HAN-port" over LoRaWAN. HAN-port, also known as a P1-port, is required on all new electricity meters installed in the Nordic countries and some other European countries.
HAN-port emits meter data at least every 10 seconds which LHi110 converts and transmits over a standard LoRaWAN IoT network. Selection of meter data and statistics calculation is configurable via LoRaWAN downlink to support different usage scenarios. Meter data related to both import and export (production) of electricity are available, as well as active and reactive components.

LHi110 is normally supplied directly from the electricity meter via HAN-port, optionally an internal connector available for external power supply.

TECHNICAL DATA

P1 interface
- LHi110 Connector: RJ12
- Cable supplied: RJ12 to RJ12 60cm cable included
- Interface standard: DSMR P1 Companion Standard (RJ12 port)

LORAWAN
- Frequency: 868MHz (EU868 region) version 1.0.2
- Output power: 14dBm
- Antenna: Built-In
- Activation mode: OTAA (Over The Air Activation), ABP available as special ordering options
- Security: Hardware crypto co-processor for secure key storage. Encrypted FW.
- Report interval: 10 minutes by default (configurable via LoRaWAN downlink).

EXTERNAL POWER SUPPLY (OPTIONAL)
- Input voltage range: 8 to 30 VDC
- Input power: 1.5W (max)
- Reverse polarity protected

MECHANICAL
- Dimensions: 91 mm x 43 mm
- Mounting method: Screws or clips using enclosure flanges or tape

ENVIRONMENTAL
- Operating Temperature: -30C to +55C   • Storage Temperature: -40C to +85C
- Operating humidity: Max 85% RH (non-condensing)   • Altitude: 0 to 2000m
- Usage class: External weather proofing required, pollution degree 2

EU DECLARATION OF CONFORMITY
LHi110 conforms to the following harmonized standards:

- EMC 2014/30/EU (SS-EN 55032:2015, SS-EN IEC 61000-6 -1 -2 -3 -4)
- LVD 2014/35/EU (IEC 62368-1:2018)
- RED 2014/53/EU (EN 300 220-1, EN 300 220-2, EN 301 489-1, EN 301 489-3)
- RoHS 2002/95/EG