LSi210 LoRa Sensor Interface

LSi210 supports remote reading over LoRaWAN using standard industrial sensors with 4-20mA or 0-10V output. Two fully independent channels can be configured for analog readings of sensor with either 4-20mA or 0-10V output. Each channel can also be configured as a digital input which can detect open/close switches.

LSi210 powers the sensors with a built-in 24V sensor power supply using two easy to find CR123A batteries. Depending on the sensor readout interval LSi210 can operate fully stand alone on battery for more than 5 years. Optionally LSi210 can also operate on a 6-24V external power supply if available.

TECHNICAL DATA

SENSOR INTERFACE

- Power supply: Supports up to two 24V sensors at 20mA. 120 ohm internal load resistor.
- Input range: 4-20mA or 0-10V analog input (12-bit ADC). 0-24V digital input
- Connector: Standard screw terminal for each channel

LORAWAN

- Frequency: 868MHz (EU868 region) version 1.0.2
- Output power: 14dBm
- Antenna: Integrated high performance antenna
- 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: Fully configurable via LoRaWAN downlink.

EXTERNAL POWER SUPPLY (OPTIONAL)

- Input voltage range: 6 to 24 VDC
- Input power: 1.5W (max)
- Protection: Reverse polarity and overvoltage protected.

MECHANICAL

- Dimensions: 120 x 65 x 40 mm
- Mounting method: Using screws inside enclosure

ENVIRONMENTAL

- Operating Temperature: -30C to +55C
- Material: Polycarbonate (UV resistant)
- IP Rating: IP68
- Storage Temperature: -40C to +85C
- Altitude: 0 to 2000m

EU DECLARATION OF CONFORMITY

LSi210 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