MOBILISIS®

Mobilisis WiGo E200

Industrial sensor gateway

Features

- Wide range of interfaces
- Serial ports, CAN, RS485/RS-422/SSI, RS-232, analog and digital input/outputs
- Support for Sick MA group of sensors
- Cellular connectivity to the Cloud via MQTT protocol
- Easy installation and parameterization
- Localization using GPS technology
- Fanless design

Product description

Various sensors and devices communicate by different protocols and Mobilisis WiGo E200 contains a wide range of communication interfaces to connect them. The main function of WiGo E200 is to collect all relevant data or events from connected sensors and store them in its memory. Saved data can then be transferred to the Cloud database with communication module for data transfer. The collected data is then presented via user interface to end user. WiGo E200 is the link between production and cloud-based data analysis. A specific example of wide-range applications is the preventive maintenance of machines. It is based on early detection of imminent signs of wear based on the evaluation of relevant indicators. Production data is collected and evaluated in the cloud to optimize production.

Mobilisis WiGo is gateway system is a system that receives and processes sensor data, and then forwards these data to a higher-level infrastructure (cloud server or local server). The system functions can be extended via the integrated applications or by adding user-defined applications.

Mobilisis WiGo sensor gateway device is used in cases when due to complexity of the system and the number of sensors and devices from which data should be collected no other device can be used. Depending on the customer's needs, different protocols can be implemented using Mobilisis WiGo interface options.

Various data recording

Mobilisis WiGo has the ability to record various data:

- Operation mode (pump, motors) – frequency input
- Impulse count (flowmeters, LIDAR sensors) – frequency input
- Analog values (temperature, pressure, level, voltage, current) - analog inputs
- MagSense orientation sensor data, for detection of opening of covers, work of moving parts, cranes, hands, doors, plow etc. - CAN
- 1-wire sensors (temperature, humidity) – 1-Wire
- User identification (iButton, RFID) – 1-Wire, RS-485
- Probe for measuring fuel and other industrial sensors – RS-485
- Data from devices with user interface USB
- Time – GPS, internal clock
- Location – GPS receiver

Application

- Asset tracking in mine sites
- Monitoring diesel tanks
- Environment perception for terminal tractors
- Monitoring the quay area
- Determining the profile of ship loads
- Access monitoring to protect against theft

Technical specification	WiGo E200
Input voltage	9 – 36 V DC (SELV with exact voltage rating)
Max current consumption	2 A
Average current consumption	100 mA @ 24 V DC (without external load)
Protection	Overcurrent, overvoltage and ESD protection (4kV IEC 61000-4-2)
Operating temperature	-20 °C to +70 °C
Case material	PA6
Flammability class	UL 94 V-O
Dimensions without antennas (WxHxL) in mm	162 x 31.7 x 101
Protection type	IP20 according to DIN EN 60529
Weight without accessories	230 g
Global (GC) coverage model[1)]	LTE-FDD: 700/800/850/900/1700/1800/1900/2100/2600
	LTE-TDD: 1900/2300/2500/2600
	UMTS: 850/900/1700/1900/2100
	GSM[2)]: 850/900/1800/1900
SIM	User replaceable, standard SIM size (2FF)
Antenna	No cable allowed between antenna and connector
Certificate	CE, RED, IP20
CPU	i.MX7D (Cortex-A7 Dual Core with Cortex-M4 co-processor)
Connectors	Peripheral connectors are of Micro-Fit (14 and 20 pin) type, 3mm spacing, 5A max, USB 2.0 type A, and two RJ45 ethernet connectors.