



CiTop-IoT

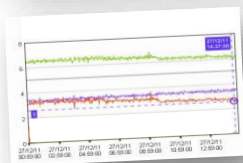
Delivers green light into your IoT automation projects!

Learn more

Introduction

NB-IOT controller is intended for special remote monitoring applications such as remote measurements, asset condition monitoring, environmental monitoring etc. It has build-in NB-IOT modem and driver. It is very compact and cost-effective solution for remote monitoring and control.

NB-IOT can be programmed to fit 100% with your application needs. Special NB-IOT functions allow you to create effective application. Easy maintenance with wireless programming through NB-IOT network.



NB-IOT - Controller



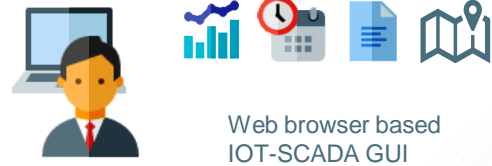
NB-IOT Controller Specification

Power supply	Replaceable 2 x 3,7V battery or 7-12VDC power, low power alert, optionally can be powered with solar panel	Analog inputs (AI)	3 AI: 12 bit, 0..5mA, 0..20mA, 4..20mA, TMP35/36, 0..2V, 0..5V, 0..10V, 0-50/100A RMS, Temperature, Humidity etc.
Enclosure and IP rating	ABS IP65 / Polycarbonate etc.	Analog outputs	1 AO: 0-5(10)V
Dimensions	W 125 x H 125 x D 50 mm	Digital inputs	5 DI: 5-24VDC, max 8mA,
Battery autonomy, periodicity	battery life 5 - 10 years, Configurable periodicity	Digital outputs	1 DO & 1 RO: 24 VDC, max 0,5A, NPN and 1 relay 24-230VAC/2A
Configuration / installation	Serial port 1: RS232/485 (for programming / Modbus)	Ultrasonic sensors	Ultrasonic Level sensor, 0 – 3m
Sensor connections	AI, Modbus and I2C	Storage temperature	-40...+80°C
Programming tool	PC based GSMProgrammer for PLC programming	Operating temperature	-40...+65 °C
Programming instructions	Logical, arithmetic, comparison, timer/counter, sequence program, reporting, queue, FIFO, PID, etc.	EMC	Immunity according to EN50082-2 & EN 50082-1 Emissions according to EN50081-1 & EN50081-2
NB-IOT Modem	Build-in, EU frequencies	Relative humidity	95%, non-condensing
Protocols (GSM)	FTP/MQTT/SMS		
List of Features	Programming via cable or remotely via GSM, SMS Alarms, SMS reports, SMS wake-up and instructions, periodical measurement, data logging and FTP sending, Real-time clock and calendar, Flash memory for program, CiTop-IOT's IOT-SCADA connection		

OPERATORS

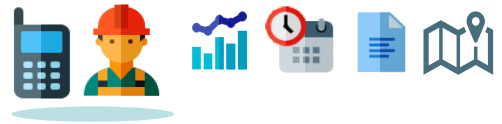
IOT-SCADA™

MAINTENANCE



Web browser based IOT-SCADA GUI

- Trends
- Alarms
- Reports
- Process Views for PCs and smartphones



NB-IOT:
MQTT
FTP
SMS

NB-IOT Controller

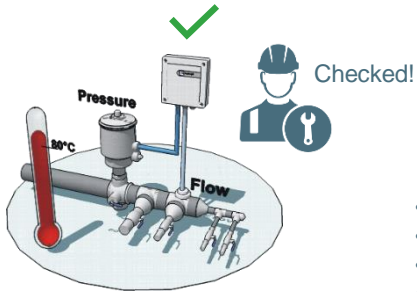


What is NB-IoT?

- NB = Narrowband
- IoT = Internet of Things
- NB-IoT is a radio access technology standardized by 3GPP for cellular wireless communication. It is especially suited for a high volume of low-complexity devices in challenging radio environments such as deep building or underground radio signal penetration.
- Designed for low power M2M communication
- Used in over 69 countries 03/2019

IOT-SCADA SERVER

NB = Narrow Band



Flow, Pressure, Temperature, etc.



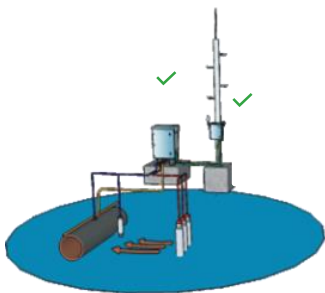
Optional I2C expansion, display and solar panel

I/O:

- 3 Analog inputs
- 1 Analog output
- 5 Digital inputs
- Pulse counting
- 1 Digital output
- 1 Relay output



PLC program, RTC, 2 PID, Flash memory



Cathodic protection, Current, Voltage, U Ref.

Modbus RTU sensors

Triaxial Vibration sensor (e.g. for wearings)



Groundwater and tank level Temperature, Humidity Co2 etc.

Gas sensors

pH, Conductivity, Redox, Turbidity, Oxygen, Ammonia nitrogen, Temperature and humidity sensors

Contact us for more information!



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