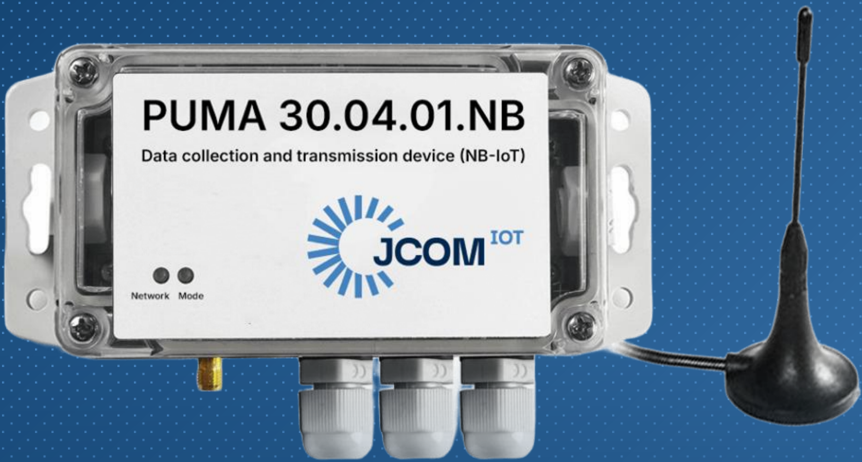

Controller of meters, data acquisition and transmission

Controller PUMA 30.04.xx.NB

PUMA 30.04.xx.NB data acquisition and transmission controller is designed for building automated information-measuring systems of resource accounting, as well as for building systems of monitoring, dispatching, status control and mode control of remote object equipment. The following types of devices can be connected to the data acquisition and transmission controller: - pulse flow meters, water meters; - leak sensors; - temperature sensors; - alarm signals from external devices; - metering devices with RS485 or RS232. The device provides data reading from external devices, with subsequent data transmission over networks of cellular operators NB-IoT. The device can be used: - as part of automated information and measurement systems of commercial resource accounting; - as part of monitoring and dispatching systems; - as part of “Smart City” projects; - as part of “IoT” (Internet of Things) projects.

Technical specifications

Name of characteristic	Value		
Device modification	Puma30.04.01.NB	Puma30.04.02.NB	Puma30.04.03.NB
Power Specifications	Built-in lithium battery with nominal voltage 3.6 V, Li, SOCl2 battery size A, capacity 3.5 Ah, standard outputs Continuous discharge current (max):1A , Pulse discharge current (max):2A Operation: -55...85 °C, Size 18.5x18.5x50.5mm Battery type - ER18505M/T (FANSO)		
Modem	SIM7020E (SIMCOM)	SIM7000E (SIMCOM)	
Built-in modem type	LTE-Cat-NB1 (NB-IoT) - FDD-LTE: 1800MHz(B3) - /900MHz(B8) - /800MHz(B20)	- LTE-Cat-NB1 - FDD-LTE: 1800MHz(B3)/900MHz(B8)/800MHz(B20) - GSM/GPRS/EDGE: 900/1800MHz	
NB-IoT protocol stack	3GPP Release 13		
Number of SIM cards	1		
SIM card type	Mini SIM (2FF)		
Indication (LEDs)	- Mode - device operation mode - Network - network status		
User interface for customization	RS485	RS485	RS485
Interface for connecting external devices	RS485	RS485	RS485, RS232
Lid opening sensor	+		
Number of independent inputs	5		
Input types	Input1, Input2 These are inputs (NAMUR-enabled) with line break or short circuit detection. Typical application is connection of a NAMUR-compliant water meter. Input3, Input4 (reed switch, digital input). They are configured for counting pulses from the connected device or fixing the connected sensor actuation. Typical applications: - water leakage sensors, motion sensors, security sensors, opening sensors. - Metering devices with pulse output (water meters, gas meters, flow meters). Input5 - connection of an external temperature sensor with 1-wire interface		
Antenna	External on magnetic base, on 3m cable		
Case	Plastic (polycarbonate)		
Mounting	On the panel		
Degree of protection	IP65		
Cable glands	Cable glands PG 9		
Connector type	Push-on terminals for connecting wire from external devices SMA for antenna connection.		
Operating temperature range	-40 to + 70°C		
Overall dimensions	145x90x40 mm (including flanges and glands)		
Weight, not more than	0.3 kg		
Service life	20 years (excluding battery)		