



# New IoT Gateway based on NanoPi Neo

## NanoPi Gateway platform expanded

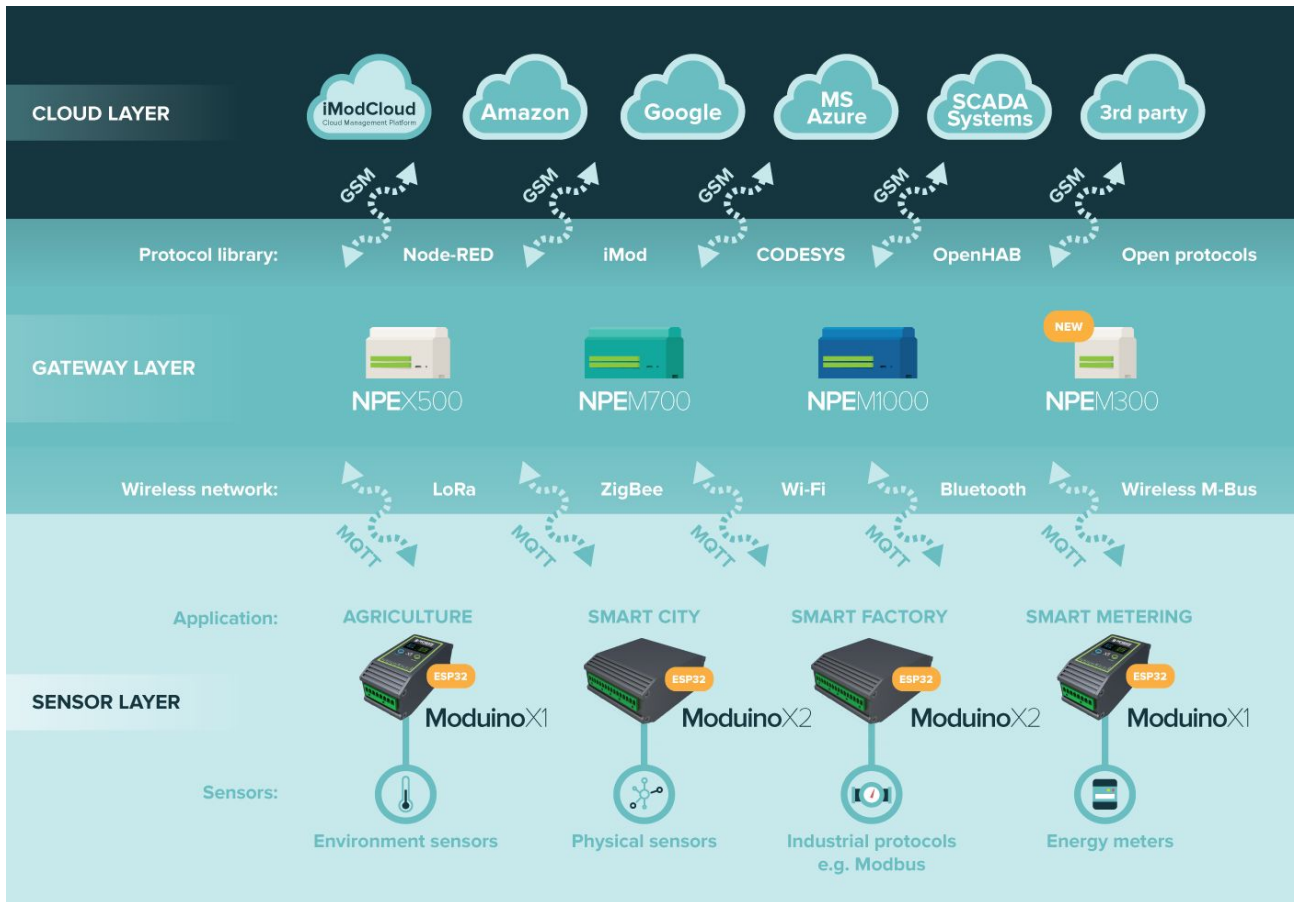
In October 2017 TECHBASE introduced newest economical addition to their M-Bus/Modbus Gateway family. Success of **ModBerry 500 series** based on Compute Module 3 and **ModBerry M700** based on NanoPi M2 drove to further development of this efficient platform. TECHBASE proudly presents **ModBerry M300** powered by **NanoPi NEO**.



- **CPU:** Allwinner H3, Quad-core Cortex-A7 Up to 1.2GHz
- **DDR3 RAM:** 512MB
- **Connectivity:** 10/100M Ethernet, RS-232, RS-485
- **USB Host:** ext. Type-A x1
- **Wireless communication:** Wi-Fi, Bluetooth, LoRa, NB-IoT (LTE cat. NB1) /GPRS/EDGE, 3G/GPRS, ZigBee, Sigfox support
- **Working Temperature:** -40°C to 70°C
- **OS/Software:** u-boot, UbuntuCore, Debian and Android
- [http://www.a2s.pl/products/ModBerry/ModBerry\\_M300\\_EN.pdf](http://www.a2s.pl/products/ModBerry/ModBerry_M300_EN.pdf)

**ModBerry M300** is designed for easy integration of Modbus RTU and TCP/MQTT/SNMP networks. With this device, Modbus serial slave devices can be seamlessly added into an existing Modbus TCP network, and Modbus TCP slaves can be made accessible to serial masters. It also has a remote web access panel that allows you to manage groups of devices. That makes integration customizable and easy.

<http://modberry.techbase.eu/>



### Wide range of protocol support

All TECHBASE's solution can be empowered with iMod software incl. protocol support for industrial interfaces, e.g. M-Bus, Modbus, SNMP, MQTT. iMod software works seamlessly with Node-RED using MQTT protocol, allowing use of **bacnet** and direct control over devices I/Os with **Google's** platform-neutral **protobuf** - extensible mechanism for serializing structured data and **zeroMQ** controls to connect the code in any modern language, on any platform. The protocol drivers library can be expanded with **CODESYS** development system to support PROFIBUS, CANopen, EtherCAT, PROFINET and EtherNet/IP.

<b>iMod</b>	M-Bus, Wireless M-Bus, Modbus TCP/RTU, SNMP, MQTT, SMS, E-MAIL, SQL/CSV
<b>CODESYS</b>	PROFIBUS, CANopen, EtherCAT, PROFINET, EtherNet/IP
<b>Node-RED, etc.</b>	MQTT, bacnet, eISCP
<b>OpenHAB</b>	Commercial product integration
<b>Other open-source protocols</b>	IEC 61850, IEC 60870-5-104, DLMS/COSEM, KNX, eHz meters, IEC 62056-21, REST



### **IP67 protection for IoT Gateway**

To expand application possibilities and provide water/dust protection for industrial devices, TECHBASE introduced optional IP67 casing. All our products can be manufactured this kind of protection, according to user's needs. For example, sealed **M-Bus Slave Gateway** can be battery powered - Independent of the power grid thanks to 13000mAh Lithium battery. It provides direct reading of M-Bus compatible meters, logging and remote access to information for pumping stations of Waterworks and Sewage Systems, dispersed residential buildings, peripheral industrial facilities.

The devices support **NarrowBand-IoT** communication technology, also known as LTE Cat NB1 (NB-IoT) and LTE Cat M1 (eMTC) with EDGE / GPRS compatibility to provide data access to spreaded sensors across the installation.

### **More information**

[http://a2s.pl/products/gateway/NBIoT\\_Wireless\\_Gateway\\_EN.pdf](http://a2s.pl/products/gateway/NBIoT_Wireless_Gateway_EN.pdf)