

MPort

Programmable IoT Serial Port Server



MPort is a bridge between the serial interface and the Ethernet network. It enables connecting devices with RS-232/485 interface to the network, eg. barcode readers, scales, magnetic card readers, telephone exchanges, etc.

MPort can work in several modes, depending on the needs of the application. The device can work as TCP Client / Server and UDP Client / Server, optionally as Ethernet Modem, and in Pair-Connection Mode, which allows you to connect any two devices with RS-232/485 via Ethernet.



MPort

MPort can be also used as:

- Protocol and Interface Converter
- Data logger
- Embedded Web Server
- Embedded Computer
- Telemetry/IoT Module
- PLC
- Industrial Modem and GPRS, 3G, 4G/LTE Router
- I/O Expansion Module
- GPRS, 3G, 4G/LTE Notify Module
- Access via Website (Visualize)
- GPS module

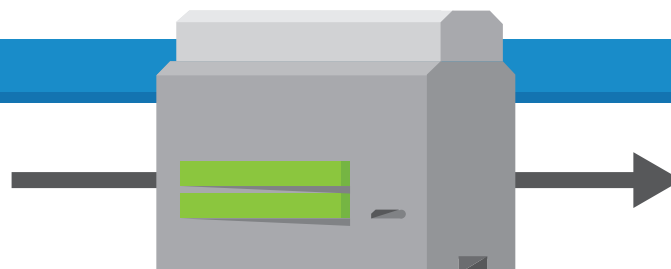
Features of adaptation to industrial conditions:

- Low energy consumption
- RTC Battery-powered Real Time Clock (RTC)
- WatchDog function ensures hardware operation control of selected services
- Effective file systems used for FLASH memory, ensuring long, failure-free operation
- Compact, durable housing made from ABS plastic, adapted to installation on a DIN bus
- Easy installation due to the use of disconnectable screw terminals
- No moving elements (fans, platter disks)
- Extended operating temperature range (optional): -30 ~ 65°C

MPort

INPUT*

RS-232
RS-485



OUTPUT*

ETHERNET
(TCP/MQTT/SNMP)

OPTIONAL WIRELESS COMMUNICATION*

GPRS/EDGE, 3G/LTE, GPS, LTE Advanced, Bluetooth, Wi-Fi, ZigBee, LoRa, Sigfox, NarrowBand-IoT, Wireless M-Bus

* all features depend on configuration

ETHERNET INTERFACE

Protocols	Transparent serial protocol (eg. Modbus TCP, MQTT, SNMP)
Number of ports	up to 2 ports
Bandwidth	100 Mbit/s
Connectors	RJ45

SERIAL INTERFACE

Protocols	Transparent serial protocol (eg. Modbus RTU/ASCII Master/Slave)
Number of ports	1/2/4/8
Serial communication standard	RS-232/485
Connectors	Screw terminal
Isolation protection	Overvoltage protection transil bidirectional 24V DC, Peak 600W

SERIAL INTERFACE SIGNALS

RS-232	TxD, RxD, GND
RS-485	Data+, Data-

SOFTWARE

Configuration	Web-panel, SSH console, Telnet console, serial console
Software type	Linux (Kernel 4.0+), iMod, iModCloud, Node-RED, Mosquitto
Network protocols	TCP, UDP, HTTP, SMTP, NTP, DNS, DHCP Client, SNMPv1 (agent), SNMPv2 (agent), ARP, Telnet
Multi-master and Multi-drop	Master mode: 128 TCP slaves/servers Slave mode: 256 TCP masters/clients

POWER SUPPLY

Supply voltage	9 ~ 30 V DC, recommended: 12V DC 1A
Power consumption w/o&w modem	5 W - 13 W (typically 10 W) / 10 W - 25 W (typically 15 W)

MECHANICAL CHARACTERISTICS

Data storage	Internal memory up to 4GB EMMC, optional external storage via USB/microSD
Casing and mounting	ABS, DIN rail mounting
Dimensions	91 x 71-106 x 61 mm
Work/storage conditions	-30 ~ 65°C, humidity: 5 ~ 95% RH (non-condensing)

MANUFACTURER

TECHBASE Group Sp. z o.o., ul. Legionów 112/21, 81-472 Gdynia



Specifications is subject to change without notice. Some of the features are optional. Technical parameters should be confirmed in the order details. TECHBASE can't guarantee cold start of a cooled down device at ambient temperatures less than -30 °C.