

MC100 SensT2

Mobile programmable sensor terminal

4G LTE IoT data terminal with sensor interfaces

The MC100 SensT2 Terminal is equipped with numerous sensor interfaces.

Node-RED™, a simple graphical programming interface supporting various pre-configured transmission protocols, can be used to forward measured values, meter readings, switching statuses and calculations to in-house servers or visualization software via LTE mobile networks.

In many cases the MC100 SensT2 can be used to replace an under-used but cost-intensive electrical PLC controller while simultaneously functioning as an IoT gateway in a single device.

Key Features:

- Programmable sensor data terminal with 4G LTE modem
- Fallback to 3G and 2G networks
- Out of the box ready for mobile Internet communication
- Ethernet interface, RS485, 4 PT100/PT1000, 8 digital inputs, 2 digital outputs, 2 inputs 4 – 20mA, 2 outputs 4 – 20mA, 2 inputs 0 – 10V, 1-Wire
- OpenWRT Linux Distribution 19.07 based on Kernel 4.14 and optimized for the ARM-based MC100 Gateway
- Node-RED™ – flow-based programming tool already installed
- Includes Node-RED™ nodes for all hardware interfaces
- Supports comprehensive cloud and server protocols
- Configuration via web interface
- Data storage on internal Flash or micro SD card
- Wide temperature range, industrial grade platform
- Wall or DIN Rail mounting

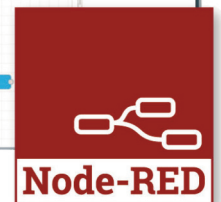
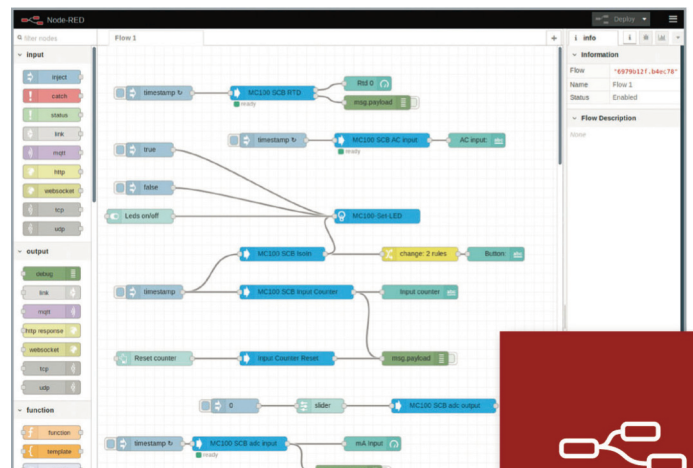


MC 100 Layer Model

Cloud and Server Protocols	OPC UA, MODBUS TCP, MQTT, CLOUD OF THINGS, HTTP, FTP, MS AZURE, E-MAIL, TELEGRAM, SMS
Applications	Node-RED™, Python™, Java™ and other
Hardware interfaces	4 PT100/PT1000 inputs, 1-wire, 8 digital inputs, 2 digital outputs, 2 inputs 4-20 mA, 2 outputs 0-20 mA, 2 inputs 0-10V, RS485

Node-RED™ is a trademark of the JS Foundation.
 JAVA™ is a trademark of Oracle.
 Python™ is a trademark of the Python Software Foundation

Node-RED – MC 100 Layer Model flow-based programming tool



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Mobile programmable sensor terminal

Product	MC100 SensT2
Art.-No.	MC100P-41Q-T-ST2-O
General	Description
Type	Wireless 4G LTE gateway with sensor interfaces
Dimensions (W x H x D)	120 x 75 x 35mm
Supply voltage	8 to 30V DC
Operation temperature	-20°C to +70°C
Housing	Plastic
Mounting	Wall mounting (DIN rail adapter optional)
Mobile	
Supporting networks	LTE Cat1 (4G): Band 1,3,5,7,8 and 20 HSDPA/HSUPA/HSPA+ (3G): Band 1,5,8, all bands with diversity GSM/GPRS/EDGE (2G): Band 3,8
Transmission rates LTE	Up to 5 Mbps uplink and 10 Mbps downlink
Transmission rates HSPA+	Up to 5.76 Mbps uplink and 21.6 Mbps downlink
Transmission rates EDGE	Up to 236.8 kbps uplink and 236.8 kbps downlink
Transmission rates GPRS	Up to 85.6 kbps uplink and 85.6 kbps downlink
Antenna connections	2x SMA (female)
Controller, Memory and OS	
Controller	ARM Cortex-A7, 528 MHz
RAM	512 MB
Flash	4 GB
OS	OpenWrt Linux
Programmable	C/C++, Python™, Java™, Node-RED™ or others
Interfaces controller board (sides)	
Ethernet	10/100 MBit/s
Power	Plug-in screw-type terminal
LED 1	Power
LED 2 and 3	Free programmable
LED 4	GSM
LED 5	GPS (optional)
SIM	Mini SIM (opt. embedded SIM)
SD card	Micro SD, up to 64 GB (internal)
Interfaces extension board (top)	
RS485	Galvanic isolated
Digital inputs	8x Galvanic isolated 0 - 30V, threshold 6V
Digital outputs	2x Galvanic isolated solid state relays, 300mA max
Analog inputs current	2x 4 - 20mA, loop supply
Analog inputs voltage	2x 0 - 10V
Analog outputs	2x 4 - 20mA
Sensor inputs	4x PT100/PT1000
Sensor bus	1-wire
Other properties	
Configurations	Basic configuration via web interface, SSH
Delivery includes	
Wall adapter	Plastic holder
Connectors	WR-TBL Series 361 - 3.81mm vertical cable entry plug (Würth)
Printed documentation	Quick Guide

Mistakes and changes are reserved.