

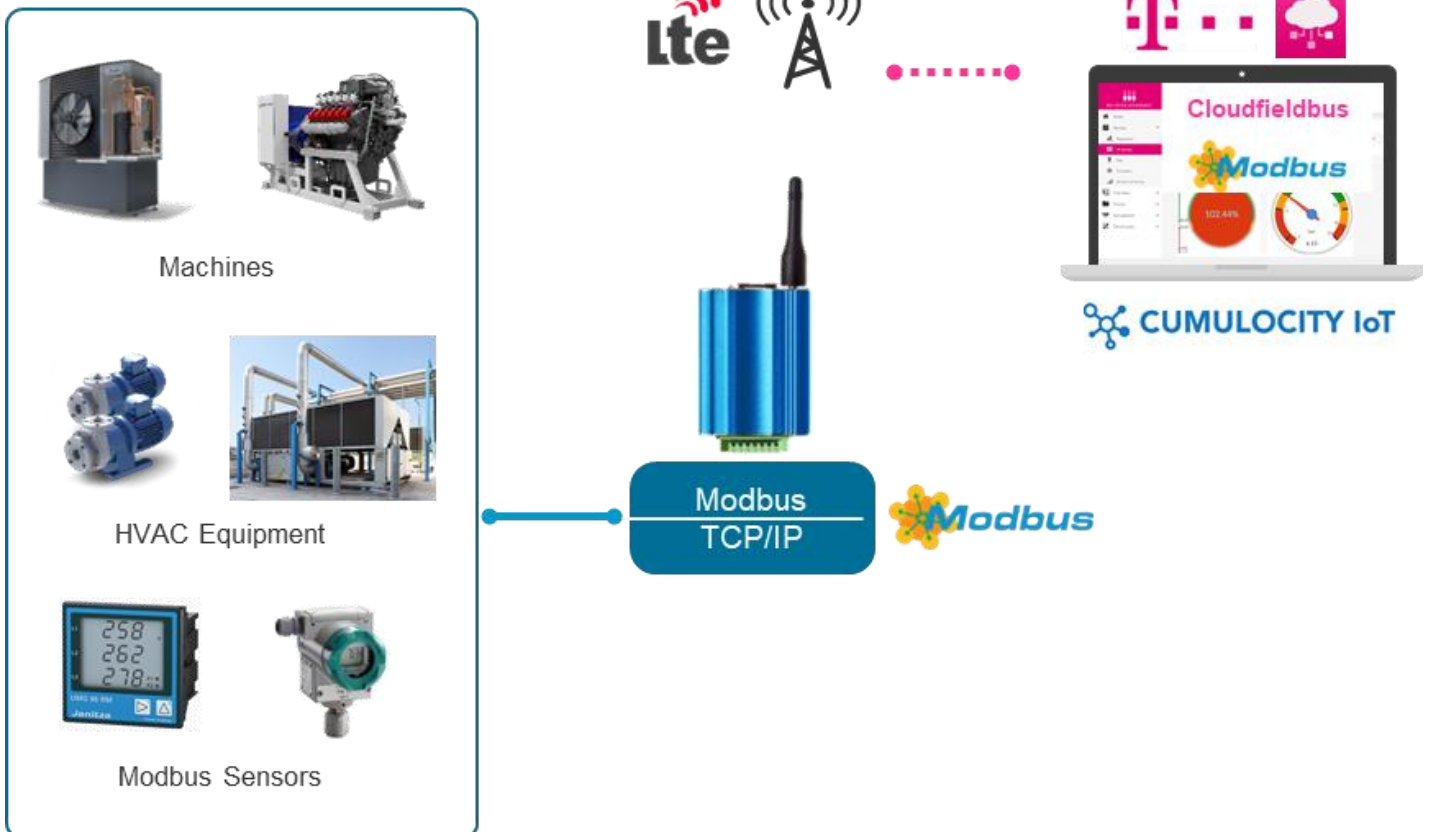
# SMARTbox mini ETH

RollOut ready IoT Gateway to Modbus devices

SMARTbox mini is a fully integrated cellular gateway with Modbus TCP/IP support for connecting to a wide range of Modbus devices. Designed to work in industrial environments, it is the ideal solution for companies looking to add remote monitoring. SMARTbox mini leverages the IoT Cloud of Cumulocity and Cloud of Things enabling Modbus protocol by the unique solution Cloudfieldbus to support customers who need to monitor large numbers of devices to easily integrate that data.

## Ready2Use – Key parameters

- ✓ Modbus TCP/IP protocol support
- ✓ DIN Rail Switchboard installation
- ✓ Telekom Cloud of Things - Cloudfieldbus for easy Mng.
- ✓ LTE cellular technology
- ✓ SIM - free selection



## Industry

Water



Air conditioning



Facility



Energy



# Specification

Radio	
<b>4G LTE</b>	LTE Cat 1 B1(2100) B3(1800) B7(2600) B8(900) B20(800)
<b>2G</b>	GSM   GPRS B3(1800) B8(900)
<b>NBIOT / LTE-M</b>	optional
<b>Regions</b>	EMEA / Optional Regions NA,LATAM,APAC

Location Service	
<b>GNSS</b>	72-channel u-blox M8 engine GPS/QZSS L1C/A, GLONASS L1OF, BeiDou B1I, Galileo E1B/C, SBAS L1C/A: WAAS, EGNOS, MSAS,GAGAN

<b>Tracking</b>	Tracking by <ul style="list-style-type: none"> <li>✓ By PowerUp device</li> <li>✓ selectable time cycle</li> </ul>
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Sensors - Fieldbus	
<b>Layout</b>	<p>GPS</p> <ul style="list-style-type: none"> <li>● GSM – flashing: Registered in Network</li> <li>● RUN – flashing: Server Exchange</li> </ul> <p>GSM Antenna</p> <p>GSM</p> <p>RUN</p> <p>SIM</p> <p>SIM Card 2FF</p> <p>Powersupply 24VDC</p> <p>Modbus TCP/IP Master</p> <p>Programming Debug</p> <p>P+ P-</p> <p>USB</p>

<b>RJ45</b>	Spec	galvanic insulated network connector 10 Mbit / 100 Mbit, Half-duplex / Full-duplex auto-negotiation no support of auto-MDIX feature
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<b>Modbus</b>	Type	Modbus TCP/IP Client
	Server Connections	max. 4 server with different IPs at same time
	Modbus TCP/IP Gateways	supported
	Baudrate	4800, 9600, 19200, 38400, 57600, 115200
	Parity	Even, ODD, NONE
	Stopbits	2,1
	Functions	<ul style="list-style-type: none"> <li>✓ Funct.1 (Read Single Coils)</li> <li>✓ Funct.2 (Read Input Status)</li> <li>✓ Funct.3 (Read Holding Registers)</li> <li>✓ Funct.4 (Read Input Registers)</li> <li>✓ Funct.5 (Write Coil)</li> <li>✓ Funct.6 (Write Holding Register)</li> </ul>
	Datapoints	Max. 10 Modbus Slaves, with 100 datapoints per device or 1000 datapoints with 1 device

<b>LED</b>	Net/Run	Cloud connection state
	lot/GSM	Sensor processing data state

<b>USB</b>	USB 2.0 HS - programming, Logging and Trace the device
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 <b>Management Platform</b>		
<b>Platform</b>	 Telekom Cloud der Dinge	
	 Cumulocity IoT	

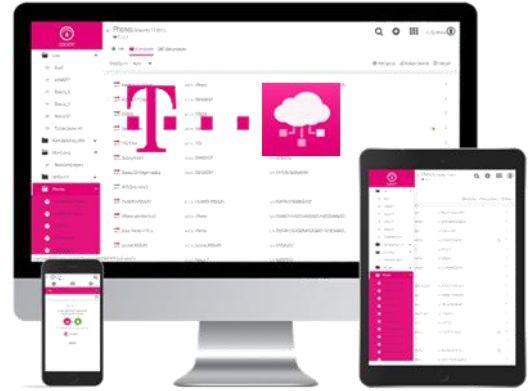
<b>Protocol</b>	MQTT over TLS1.2
<b>Access</b>	Bi-directional communication
<b>OTA</b>	yes

 <b>General</b>	
<b>Dimensions</b>	72 x 53,5 x 26 mm
<b>Weight</b>	89g
<b>Antenna</b>	SMA Connector
<b>Supply</b>	Nominal voltage range: 12-30 VDC, +/-10% Maximum continuous (average) supply current: 300 mA at 12V, 150mA at 24V
<b>Mounting</b>	Via DIN Rail Adapter
<b>SIM Card</b>	2FF
<b>Operate T/H</b>	-40..85°C / Max. 85%
<b>Storage T</b>	-40..85°C / Max. 85%
<b>IP Class</b>	IP20
<b>Approvals</b>	
<b>Conformity</b>	2014/53/EU (Radio Equipment Directive - RED)  Radio EN301511 v12.5.1 EN301908 v13.1.1  EMC EN 301489-1 v2.2.0 General Part EN 301489-52 v1.1.0 DIN EN 61326-1 - 2018-09  Safety DIN EN 61010-1:2020-03;VDE 0411-1:2020-03
<b>Warranty</b>	2 years

# Remote Manager

## Capabilities

- ✓ Fleetmanagement:
  - ✓ Activate, monitor and diagnose your mission-critical devices from a single point — on your desktop or mobile app – Telekom Cloud of Things
  - ✓ Configure your Modbus devices in Cloud by Cloudfieldbus application
  - ✓ Monitor the health of your connected facility by taking graphs from a repository of different widgets
  
- Cockpit:
  - ✓ Creating threshold monitoring, events, critical alarms ,warnings and reports
  
- Open API:
  - ✓ Create Notifications or simply use the REST API from the Cloud platform to feed your third party system with all the data



## Platforms

Telekom Cloud of Things	
Cumulocity IoT	
Siemens Mindsphere	
Telia IoT Hub	
A1 Digital	
Ooredoo IoT Hub	

# Ordering Codes

IoT Gateway	Ordercode						
mini ETH	MB2033010XX	12-36VDC, IP30		RS485, Modbus RTU Master	LTE Cat1, 2G Fallback		
mini ETH GPS	MB2033210XX	12-36VDC, IP30		RS485, Modbus RTU Master	LTE Cat1, 2G Fallback	GPS, Glonass	

Accessoires	Ordercode	
PowerSupply 24V TypC	70400	Powersupply 24VDC/1A for mini and cube series, with 2pole 3,81 connector
GSM HQ SMA	70624	Antenna adjustable, Covering Worldwide LTE Bands, 3G/2G Fallback, SMA
GSM HQ SMA 5m cable	70622	Antenna, Covering Worldwide LTE Bands, 3G/2G Fallback, SMA
SET mini DINRail holder	70716	Din Rail Adapter for Mini Series