

Datasheet: com.tom M-BUS 2.1

The com.tom M-BUS 2.1 is a ready-to-use telecontrol device. The device offers several communication interfaces like a GSM/GPRS-Modem, Ethernet and a serial port. Furthermore an M-Bus-Interface, two digital S0-inputs and two digital outputs are present. With the preinstalled WEB-PLC editor and the included WEB-PORTAL communication via GPRS a turnkey solution for telecontrol is given.

The WEB-PLC enables with the AND, OR, XOR, FF, TIMER and COUNTER functions an operating sequence.



Technical data

IPC@CHIP® Add-On	SC143-LF Embedded Controller GM01 modem: - Quad Band GSM (850/900/1800/1900 MHz) (SIM-card inserted at the back)
Ethernet interface	1 x 10/100BaseT, RJ45 connector with traffic and link LED
Serial interface	1x RS232, RS485 or RS422 (selectable) with (one) DSUB9 connector
SD Card interface	MMC/SD memory card
M-Bus-Interface	max. 32 devices max. distance 5 km 300 bit/s AWG15
Digital S0-Inputs	2 x 10 mA max. frequency 50 Hz
Digital Outputs	2 x Transistor (high-side) 24 V DC, max 500 mA short-circuit and overload resistant, no potential isolation, mating connector Weidmüller BL 3.50/10 included in the delivery scope
Supply voltage	24 VDC (-15% / +15%) mating connector Weidmüller BL 3.50/3 included in the delivery scope
Active current	max 200mA (at 24VDC) + current digital outputs
Antenna / Antenna Interface	SMA Female socket

Software engineering

Operating System	IPC@CHIP® RTOS
WEB-PLC - Editor and Runtime	<p>Web based Editor, installed on the internal WEB-SERVER</p> <p>PLC function units:</p> <ul style="list-style-type: none"> - Binary – AND, OR, XOR - Bits and bytes – Extract, Pack, Put Pit, Unpack - Messages – Send, Receive - Numerical – Counter, Compare - Special – Enable/disable, OpenVPN - Storage and edge detection – RS Flipflop, Trigger - Timing – TON, TOFF, TP, Timer <p>IPO cycle time: 25 ms</p> <p>Up to 128 units, I/Os, portal variable I/Os and constants</p> <p>16 com.tom PORTAL variables</p> <p>Up to 786 I/Os</p>
WEB-PLC – Additional functions	<p>Event Log - System events are logged with timestamp and message</p> <p>Simple Network Time Protocol Synchronization of the system clock</p> <p>OpenVPN - To integrate your com.tom device into a virtual private network (activation through com.tom PORTAL</p> <p>COM Server - According to RFC 2217</p> <p>DHCP Server - Up to 100 clients, up to 10 static leases</p> <p>NAT - To route traffic between a local (internal) and a global (external) network, up to 500 mappings, up to 10 static mappings</p> <p>Firewall – Filters incoming traffic, up to 500 rules (incl. dynamic rules for outgoing traffic)</p> <p>Messages - Sending and receiving short messages, up to 10 templates receiving and sending respectively</p> <p>Update - Over com.tom PORTAL, local WEB page or SD card</p> <p>CODESYS network variables – Up to 32 lists and 256 values</p> <p>Export – Export the diagram and/or the settings of your com.tom device as an update package</p> <p>IEC 60870-5-104 Server (optional) – Up to 512 values</p>

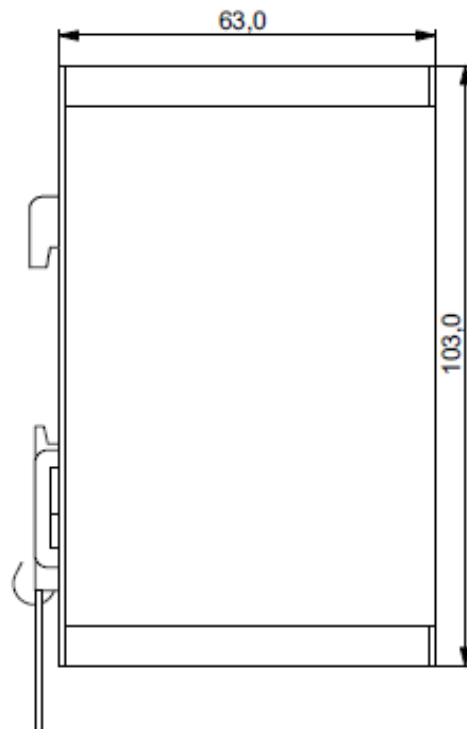
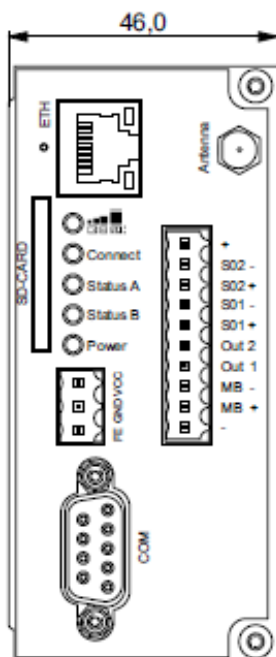
	M-Bus – Up to 32 meters and 512 values. Primary or secondary addressing
	Modbus - RTU master and TCP client, up to 32 devices and 128 values
com.tom PORTAL communication	<p>Predefined and installed:</p> <ul style="list-style-type: none"> - device information - 8 alarms - update - Open VPN activation and status - 16 com.tom PORTAL variables - WEB-PLC I/Os - Modbus I/Os - M-Bus values - IEC 60870-5-104 server I/Os - CODESYS network variable I/Os

Environmental

Operating temperature (TA)	0°C to +55°C (-20 °C to 60 °C upon request)
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Mechanical data

Size (W x L x H)	46 x 103 x 63 mm
Material	Continuously hot-dip aluminium-zinc coated steel sheet (DIN EN 10215)
Mounting	DIN rail mounting



Modem Certifications and Compliance

FCC Rules Parts: 15B, 22H, 24E	FCC ID: RI7T56HQ1
EN301 489-1 & 7	GCF 3.27.1
NAPRD 3.14.0	R&TTE - LVD 2006/95/EC

Compliance and Conformity

CE, R&TTE, RoHS/WEEE	
- EMC emission	IEC 61000-6-4
- EMC immunity	IEC 61000-6-2
- Protection Rating	IEC 60529: IP20
- Electrical Shock	IEC 61140: Class III
- Low Voltage Directive	IEC 60950-1
- R&TTE Directive	EN 301 489-1/-7, EN 301 511

Ordering information

Order-No. com.tom M-BUS 2.1:	570612
Accessory IEC 60870-5-104 Server:	570796
