

## Datasheet: com.tom RADIO-UMTS 7.1 S

The com.tom RADIO-UMTS 7.1 is a ready-to-use device to develop an application specific solution with short development lead times. The device offers several communication interfaces like a 3.5G Modem, Ethernet and a Serial port. With the preinstalled WEB-PLC editor and the included WEB-PORTAL communication via 3.5G Modem a turnkey solution for telecontrol is given.

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

With the integrated switch and the auxiliary com.tom-functions, a compact and cheap VPN and NAT access to controls and devices in the local network structure is given.



### Technical data

IPC@CHIP® Add-On	SC143-LF Embedded Controller GM02 modem: - Quad Band GPRS (850/900/1800/1900 MHz) - Tri Band UMTS modem (850/1900/2100 MHz) (SIM-card is inserted at the back)
Ethernet interface	1+4 x 10/100BaseT, RJ45 connectors with traffic and link LED
Serial interface	1x RS232, RS485 or RS422 (selectable) with (one) DSUB9 connector
SD Card interface	MMC/SD memory card
Supply voltage	24 VDC (-15% / +15%), Mating connector Weidmüller BL 3.50/03 included in the delivery scope
Active current	max. 200mA (at 24VDC)
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"> <li>- Binary – AND, OR, XOR</li> <li>- Bits and bytes – Extract, Pack, Put Pit, Unpack</li> <li>- Messages – Send, Receive</li> <li>- Numerical – Counter, Compare</li> <li>- Special – Enable/disable, OpenVPN</li> <li>- Storage and edge detection – RS Flipflop, Trigger</li> <li>- Timing – TON, TOFF, TP, Timer</li> </ul> <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>
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>

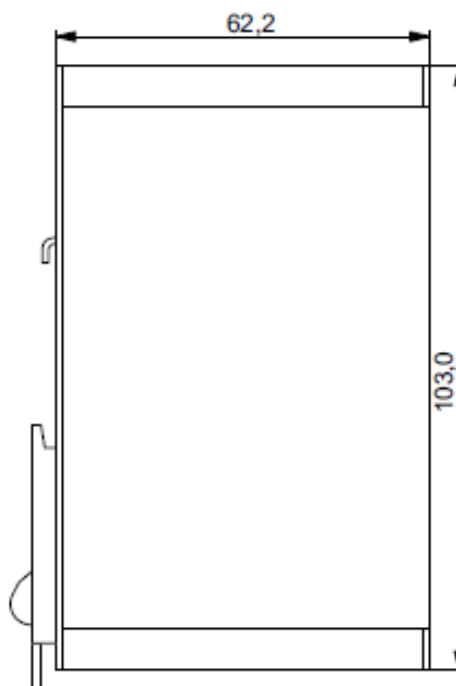
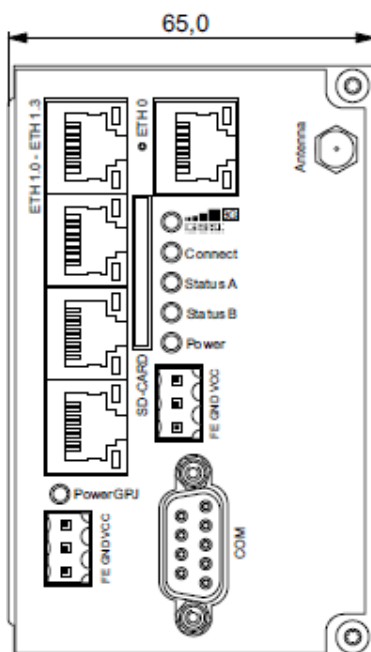
	IEC 60870-5-104 Server (optional) – Up to 512 values Modbus - RTU master and TCP client, up to 32 devices and 128 values
com.tom PORTAL communication	Predefined and installed: <ul style="list-style-type: none"> <li>- device information</li> <li>- 8 alarms</li> <li>- update</li> <li>- Open VPN activation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

**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)	65 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

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**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

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**Ordering information**

Order-No. com.tom RADIO-UMTS 7.1 S: 570892

Accessory IEC 60870-5-104 Server: 570796

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