



TG-200 TeleControl Gateway



Semaphore's T-BOX model TG-200 TeleControl Gateway is ideal for bringing live and historical information from remote sensors and process equipment on line. Using integral Ethernet, RS-232, and RS-485 ports, TG-200 interfaces with intelligent, remote devices and provides data over wide area cellular networks.

Semaphore's innovative push and Web server technologies open up many new possibilities. Now, you can receive alarms and reports automatically on your cell phone, PDA, or computer. Automatic alarm escalation ensures that all key personnel are fully informed. The T-BOX TG-200 not only stores live and historical information, it also maintains formatted reports and Web pages. Using push technology, it transmits them to multiple recipients as events dictate. No polling is necessary. This capability keeps network traffic to a minimum while reducing the infrastructure and network overhead costs associated with traditional SCADA networks.

KEY FEATURES:

- Integral Web Server
- IP Pass-through, FTP, Email, POP3
- Time Sync via NTP (Network Time protocol)
- Reports in TXT, CSV or XML format
- Ethernet, RS232 (2 wire) and RS485 ports
- Integral GSM/GPRS Modem
- Programmable using IEC61131-3 Ladder or Basic
- Modbus (Master and Slave), DNP3 Slave, DF1, IEC60870 Slave Protocols
- Integral battery charger
- SD Card for Program backup
- Data Logging
- Remote Configuration

TG-200 TELECONTROL GATEWAY SPECIFICATIONS

Designation	Industrial-grade, all-in-one remote terminal unit (RTU)
Processor	16-bit Mitsubishi 7.37 MIPS
Clock	Real-time clock with lithium battery backup
Memory	Flash 768 KB used for OS, logic, Web pages, and reports
	RAM 384 KB used for data logging
	SD/MMC card up to 1 GB for program storage
Communication	RS-232 Modbus slave — 2 wires (Rx/D/TxD)
	RS-485 Modbus slave or master — 2 wires (maximum of 256 slaves)
Ethernet 10/100BaseT	RJ45 connector
	Maximum of 8 sockets
	Protocols — Modbus TCP Master and Slave, FTP, SMTP, POP3, Ping, HTTP
	LED Indications for Speed and data transmission
GSM modem	Frequencies: MTS 900/1900/2100 & GSM850, EGSM900, DCS1800, PCS1900
	Modes: CSD — GPRS — EDGE — UMTS — HSDPA
Antenna	FME male connector
Push button	RUN-STOP-RESET
Programming	Via TWinSoft Suite (automation, Web editor, report editor)
Automation languages	Ladder logic (IEC 61131-3), Basic, Function Blocks, Microsoft Windows® Automation
Alarm handling	Smart alarm management with embedded calendar
Datalogging	Intelligent logging: sampling tables (instantaneous, min, max, average, incremental), digital and analog chronologies, SoE
Timestamp resolution	1 second
SCADA compatibility	T-VIEW, WIZCON, CITECT, Wonderware (InTouch), iFix, Topkapi, Cube, Labview, Panorama...
Remote upload	Up to firmware level
IT features	HTTP, FTP, SMTP (email), POP3, IP forwarding, DynDNS, NTP, Industrial Defender ready
Power — main	DC Powered, 9 to 30V DC
	Input voltage must be 24V DC if backup battery is connected Current consumption — ~100mA
Power — backup	Integral battery charger for sealed lead acid batteries ONLY Maximum size 7A-hr, 13.8 V DC
Temperature	Storage: -40° to +85° C/-40° to +185° F
	Working: -40° to +65° C/-40° to +149° F
Humidity	15-95% noncondensing
Material	Proprietary aluminum enclosure, anodized and Alodined for corrosion and noise interference resistance
Safety certifications	CE LVD 2006/95/EC; CEBEC IEC 60950-1:2005 (2nd edition) and IEC 60950-1:2006; CAN/CSA C22.2 No. 60950-1-07; ANSI/UL 60950-1, 2nd Edition
EMC certifications	CE EMC 2004/108/EC, EN61000-4-2, 3, 4, 5, 6, 11, EN61326-1; C-Tick EN61326-1:2006; FCC CFR47: 2008 (Part 15 Sub Part B), EN55011: 1998+A1+A2
Telecom certifications	Industry Canada RSS-132 Issue 2, RSS-133 Issue 5; A-Tick AS/ACIF S002:2005; Telepermit PTC 211/09/043-044
Other certifications	GOST-R
MTBF	MTBF > 400,000 hours, statement available on request
Size	Height x depth x width: 150 mm x 83 mm x 29 mm/5.91" x 3.27" x 1.14"
Weight	300 gr/9.65 oz

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