

Wireless & low power RTU

Internet
ready



Industrial

SCADA

Pipeline

Mining

Power & Gas

Environment

Water & Sewage

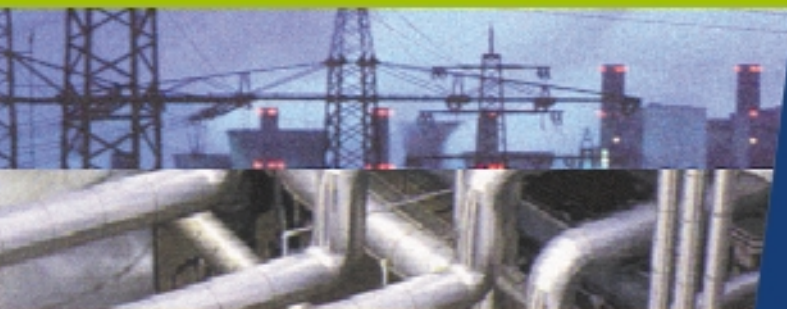
Pollution

Weather

Farming

Irrigation

REMOTE MONITORING AND CONTROL



Techno
Trade

TBOX LP 300

LP-300 specifications

LP-300 is a wireless, low power controller design to be used in remote non-attended monitoring and control applications. It combines monitoring, data logging, controlling, alarming, SMS, Email and FTP Internet functions into a portable and robust IP66 enclosure. LP-300 Remote Terminal Unit (RTU) can be used as a standalone station or as an integral part of a complete short & long range wireless control network. Advanced functionality, low power, wireless technology, high-speed Radio & GSM data rate plus superb immunity to interference, qualifies the LP-300 for potentially limitless applications. In addition to its standard monitoring and control functions, the LP-300 can be connected to a wide range of sensors such as tank level, soil moisture, soil temperature, pollution, water flow, water pressure, water & sewage, weather station, frost and many other environmental related sensors.

LP-300 main controller board

Ultra low power CPU, 16 bits, 7.4MIPS
Real Time clock, battery backed
256K Flash memory
128K static memory, battery backed
Data Logging with time stamp
Diagnostics through switchable LEDs

Communications

Three built-in communications ports
COM1: RS232. Programming and diagnostics
COM2: primary Radio modem board
COM3: GSM or Radio modem board
Protocol: MODBUS RTU (or other protocols)
Network Topology: point-to multipoint, Master/Slave
Radio Technology: spread spectrum & frequency hopping
Radio Frequency: multi channel 922MHz or 2.4GHz, license free
RF rate: 9600 baud. Pre-selected
Radio Transmitter power: 130mW (922Mhz), 50mW (2.4GHz)
Radio Receiver sensitivity: -110db (922Mhz), -107db (2.4GHz)
Antenna: optional. External, TNC connection

Inputs & Outputs

8 x Digital outputs: 20V Max. 2A cont. 4A pulse. Protected
8 x Digital inputs: 30V Max. Protected
4 x Analog inputs: 0-5V, 0/4-20mA 10bits
Inputs excitation: internal. Self powered 12V / 24V

Power requirements

Battery: 12VDC, internal, 1.3A/hr-to-7.0 A/hr.
Power consumption: 3mW minimum, CPU in sleep mode
Power usage profile: programmable for optimum conservation
Battery charger: built-in. Charging is temperature regulated
Solar panel or wind generator: direct connection. Regulated

GSM, SMS & Internet Connectivity

The optional GSM modem board enables the LP-300 to send alarm messages in SMS format
Receive commands in SMS format
Send alarms and logged data (full statistical report) via Email or FTP

Programming:

Software: by TwinSoft programming Suite, including internal script language (BASIC) for local automation

General

Operating conditions: -20°C to +65°C, 75% RH non-condensing
Enclosure: UV stable durable plastic. IP66 compatible
Wiring: internal. Removable wiring terminal blocks
Cables: inserted via sealed glands
Mounting: 4 x 5/32 screws
Dimensions: 255x180x125 mm (WxHxD)
Weight: 800 gr (without battery)



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