M2MBoxPro

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Multi-functionnal Industrial Gateway

The M2MBoxPro is a ready-to-use industrial gateway for voice, data, fax and SMS services. The M2MBoxPro supports cellular connectivity as well as Ethernet, serial ports (RS-232 and RS-485), USB and various industrial interfaces. Fully customizable using ClearConnex's ClearComm, the M2MBoxPro can be easily controlled by using AT commands over UART, TCP, UDP, SMS and email. As an M2M specialized, mature, proven, software platform, Clearconnex's Clearcomm is ideal for fast customize developement.

Interfaces

- 1x RS-232
- 1x RS-485
- 1x Ethernet
- 1x Audio
- 1x USB console
- 8x Digital inputs
- 2x Analog inputs
- 4x Digital outputs
- 1x I^{2}C
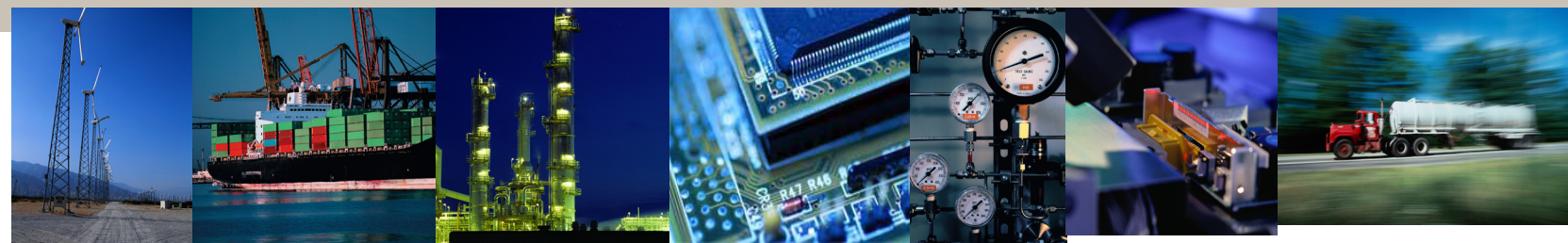- 2000 mAh optional battery back-up

Software Support

Powered by ClearComm

- Binary and ASCII protocol
- Bearer Management
- NAT, DHCP server/client, Port Forwarding
- HTTP POST, GET, PUT
- Flat «Tag» File System
- GPIO Control
- Power Saving Modes
- Firmware OTA update over HTTP or FTP
- Email SMTP and POP
- Security, HTTPS, FTPS

Applications

- Industrial Automation
- PV Plant Monitoring
- Digital Signage
- Street Light Management, etc.

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GENERAL FEATURES

Quadband GSM 850/900/1800/1900 MHz
GPRS class 10 / EDGE class 10
ETSI GSM Phase 2+ compliant
6 Connections LEDs: Power/GPRS/LAN/Serial 1/Serial 2/ I²C
3 Applications LEDs: Status/B1/B2
2 User Buttons: B1/B2
Din Rail Mountable
Real time clock backup up by Supercap
Build-in watchdog chip to prevent modem lockup
Control via AT commands (GSM 07.05, GSM 07.07 and Sierra)
Temperature range:
Operational: -30°C to +70°C (without battery)
Storage: -40°C to +85°C (without battery)
Casing: plastic ABS material
Dimensions: 157.5 x 83 x 57 mm
Weight: 320g

ELECTRICAL CHARACTERISTICS

Supply voltage range: 9-28V DC
Power consumption: 2W EGSM 900/GSM 850 radio section/ 1W GSM 1800/1900 radio section
Embedded 2000mAh lithium back-up battery (optional)

GPRS / EDGE

GPRS Multislot class 10 / EGPRS Multislot class 10
Mobile station class B
PBBCH support
Coding schemes CS1 to CS4 for GPRS
Coding schemes MCS1 to MCS9 for EGPRS

CSD DATA TRANSMISSION

Asynchronous, Transparant & Non Transparent
CSD up to 14.4 kbps

SMS

Point-to-point MO/MT
Text & PDU
Cell Broadcast

FAX

Fax G3 (class 1 & class 2)

ORDERING INFORMATION

M2MBOXPRO

INTERFACE

Antenna: SMA female connector
Serial Host 1: RS232 on 9 pin female sub-D connector
Serial Host 2: Modular RS232/RS485 on RJ45 connector
Ethernet 10/100 base T
Audio on RJ-11
USB Console: 12Mbit/s full speed transfer rate, 3.3V type compatible
8 Digital Inputs: 0-24V opto-oisolated
4 Digital Outputs: Open Collector, opto-isolated
2 Analog Inputs: Voltage or Current
I²C +±8kV air discharge ESD Protected
DC power supply connector
Sim card: 1.8 V / 3 V

SOFTWARE SUPPORT BY CLEARCONNEX

Processor: Sierra Wireless CPU (Memory 256 KB SRAM & 1.5MB Flash)
OS : Sierra Wireless OPEN AT
Pre-installed features:
Binary and ASCII protocol
Bearer Management
AT commands over SMS or Telnet – Remote Diagnostics
Firmware Over The Air (FOTA) updates
TCP or UDP Socket over Ethernet or GPRS / UART Passthrough
HTTP POST, GET, PUT
Email SMTP and POP
GPIO control
Flat «Tag» File System
NAT / Port Forwarding
Voice Call Management
DTMF tone generate and detect
Security, HTTPS, FTPS
General Device Management
Many Configuration Options

M2M APPLICATION SERVER INTEGRATION

Axeda
Exosite
Gentrifi
GpsGate
SensorLogic
VIsTracks
ClearComm Test Server

CERTIFICATIONS

R&TTE / FCC / PTCRB

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