Atlas Max - RTL® type Hydra-4S

Multifunctional processing computer

Application

Atlas Max - RTL® type Hydra-4S is a process computer-gateway that can be used as a data concentrator and protocol converter, as well as a road traffic station harmonized with the TLS-2012. Built-in GPRS modem provides wireless communication using GPRS and/or SMS. Time and position information acquired from GPS/GLONASS enables Atlas Max - RTL Hydra-4S to serve as time server.

Atlas Max - RTL® type Hydra-4S provides reliable data acquisition from various devices using different communication directions and protocols. Collected and processed data can be visualised locally (HMI touchscreen) and/or sent to supervising SCADA server.

Technical characteristics

- Processor AM3358 1GHz ARM Cortex-A8
- 512MB DDR3 RAM
- 4GB 8-bit eMMC Flash
- 16GB micro SD
- Possibility of simultaneous communication with 4 SCADA centers
- Support for redundant transmission paths and defining data volumes depending on the transmission path
- 4 x RS-232/485 port (galvanically isolated)
- 4 x digital output (galvanically isolated)
- 1 x I2C & 1x CAN (galvanically isolated)
- Ethernet port 10/100Mbps
- Integrated battery charge meter
- Supported protocols:
  - IEC 61850 Client/Server
  - IEC 60870-5-101 Master/Slave
  - IEC 60870-5-102 Master
  - IEC 60870-5-103 Master
  - IEC 60870-5-104 Client/Server
  - MODBUS RTU and TCP Master/Slave
  - MODBUS TCP Client/Server
  - NTPv4 Server/Client
  - PTP (IEEE 1588) Master/Slave
  - IRIG-B (B002, B003, B006, B007) Generator/ Receiver
  - SPA Master
  - DNP3 Master/Slave
  - Hart Master
  - BACNET Master
  - GOOSE
  - NEO Master
  - FINS Master
  - DLMS
- Connection to 4G, 3G and 2G network
  - 2FF format SIM card
  - SMA antenna connector
- GPRS protocols
  - PPP/TCP/UDP/HTTP/SSL

- Security
  - DDOS prevention
  - SYN security
  - SSH attack prevention
  - HTTP/HTTPS attack prevention
- Reception and distribution of accurate time using NTP, PTP, unmodulated IRIG-B protocol and GPS receiver
- 1PPS accuracy ±100ns after synchronization
- Creating a PLC algorithm using a functional block diagram
- Temperature range: [-40÷+60]°C
- Supply voltage: [9÷36]VDC
- Consumption: 5W
- Dimensions: [53x103x145]mm
- Aluminum housing for mounting on a DIN rail

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