Aport-212 Modbus Gateway

78mm

108mm

- ▸ Gateway of Modbus TCP to Modbus RTU/ASCII
- ▸ Two Configurable RS-232/485 serial ports
- ▸ Supports up 16 Modbus TCP masters or 32 Modbus TCP slaves
- ▸ Supports transparent serial to Ethernet conversion
- ▸ One 10/100 Mbps Ethernet port
- ▸ Supports Telnet, Web and serial console configuration
- ▸ Support Command Line Interface configuration
- ▸ Windows configuration utility included
- ▸ Firmware upgradeable by Ethernet/Internet

Overview

Aport-212 Modbus gateway provides two-way Modbus TCP to Modbus RTU/ASCII communication conversion. Easy to use Windows configuration utility provides flexible Modbus device address mapping and protocol testing. Transparent serial to Ethernet conversion is also available as default to maximize the flexibility of system configuration. Open command line interface allows users easily integrate Aport-212 into their application program.

Hardware Specifications

CPU/Memory
CPU: 32-bit ARM SoC

Network Interface
Type: 10/100Mbps Ethernet, RJ-45 connector
Protection: 1.5KV magnetic isolation

Serial Ports
Port 1: RS-232/422/485
Port 2: RS-232/485

Serial Port Parameters
Baud Rate: 1200 to 921600 bps
Data Bits: 5 to 8
Stop Bit: 1 to 2
Flow Control: None/Hardware/Xon_Xoff
Protection: 15KV ESD

Serial Console Port
RS-232: 115200 baud rate, No flow control, 8 bits data, 1 stop bit

Operation Mode
Modbus Gateway:
Slave RTU
Slave ASCII
Master RTU
Master ASCII
S2E Gateway:
TCP server
TCP client

General
Power Input: 9-40 VDC power jack and terminal block
Dimensions: 108 x 78 x 25mm (HxWxD)
Operating Temperature: 0 to 60ºC
Storage Temperature: -20 to 85ºC

Ordering Information

Aport-212	Modbus Gateway with 2 serial ports, and 1 Ethernet port

Block Diagram

TCP MB Master

16 max for UART 1   16 max for UART 2

Unit ID
1-123

Unit ID
124-247

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Aport-212 (Server Mode)

UART 1   UART 2

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MB Slave   MB Slave   MB Slave   MB Slave

Serial

Address   Address

Ethernet

Unit ID Range@IP

MB Slave   MB Slave   MB Slave   MB Slave

32 max for UART 1   Aport-212 (Server Mode)   32 max for UART 2

UART 1   UART 2

MB Master   MB Master

Address
1-247

Address
1-247

Serial

TCP
Master   TCP
HMI   TCP
Slave   TCP
PLC

Ethernet   Console

LM3S9B90
80MHz
256K Flash
96K SRAM

JTAG

GPIOx4 + 1
(CAN/I2C)
USBx1

32M
SDRAM

UART 1   UART 2

RTU or
ASCII
Slave   Digits
Meter   Serial
HMI