



MULTENET

EtherPAD Duo

The EtherPAD Duo is a versatile device that can be used in stand-alone, DIN rail or 19" rack-mount applications. It requires an external power supply and has a 10/100Base-T Ethernet interface and two RS232/RS422/RS485 serial interfaces connecting up to two asynchronous serial devices to Ethernet networks.

This product range includes the following hardware configurations:

Manual or auto-selectable 10/100Base-T Ethernet to two software selectable RS232, RS422 or RS485 serial ports

...and the following key-enabled software options:

Data Logging, Scripting, PPP, Routing, Modbus

Features include:

- Device network connectivity via UDP/IP, TCP/IP with SNMP MIB II protocol suite.
- Data logging facility with attachment email option.
- Device management via Telnet, BootP/TFTP, Web Browser, SNMP, Built-in Serial configuration interface, Windows and Linux configuration Utility.
- Web enabled allowing unit configuration and serial device manipulation via Web browser as well as ability to download custom web pages, client side Java, images and active content to interface to serial device.
- Flash memory for convenient software updates via FTP.
- Modbus Bridge and Scripting.
- Dynamic Routing and PPP-over-Serial.
- Multiple Network connections allowed to the same Serial data stream.
- DIN Rail mounting and 19" rack mounting kits available.

Software Specification

- **Network Protocols:** TCP/IP, UDP/IP, BootP/DHCP, TFTP, ICMP, ARP, Proxy ARP,

Telnet, FTP (client & server), HTTP, SMTP, DNS, PPP, RIP, SNMP (v1), Modbus/TCP, Modbus/UDP, Redirector (RFC2217)

- **Serial Protocols:** Raw, Redirector, TC500, Modbus/RTU, Modbus/ASCII
- **Parity:** None, Even, Odd, Mark, Space
- **Flow Control:** None, Hardware (RTS/CTS), Software (XON, XOFF)
- **Data Size:** 5, 6, 7, 8
- **Stop bits:** 1, 2
- **Data Throughput:** 300 - 115200 Baud
- Web Server
- Password protection
- Firmware upgrade over serial Kermit or network
- Multiple concurrent network connections (50 max)
- Debug and diagnostics tools

Hardware Specification

- ARM7 processor
- 8MB RAM, 4MB Flash
- 10/100Base-T Ethernet line interface
- RS232/RS422/RS485 Serial interface
- RS232 Serial configuration interface
- LED indication for Ethernet & Serial port status, and indicators for Duo health.

Physical Specifications

Connectivity:

Ethernet: RJ45 (10/100Base-T)

Serial port (RS232/RS422/RS485): DB9 male

Serial Configuration port (RS232): RJ12

Enclosure: Black anodized aluminium extrusion with aluminium faceplates.

Dimensions: 127mm x 104mm x 50mm

Weight: 570g

Temperature Range Operating:

0 degrees Celsius to 60 degrees Celsius

Temperature Range Storage:

-20 degrees Celsius to 85 degrees Celsius.

Standards Compliance

UL, CE, IEEE 802.2, IEEE 802.3

Electrical Specifications

Power requirement:

External Power supply: 5W - 10V-30V DC or 10V-20V AC (power supply adapter available as an option). Power connector on front for DIN Rail PSU connection.

Software Options Available

- **Data Logging:** Selectable Time & Date Stamping of logged data in Text format. Email or FTP transfer of files or downloadable via a Web Browser.
- **Scripting:** SANScript creates powerful custom applications which includes embedding data into the web server. Serial & Network data can be manipulated as it traverses the EtherPAD.
- **PPP:** Connect an external modem to the Serial Interface.
- **Routing:** Forward IP packets through the device.
- **Modbus Scripting:** SANScript commands for manipulating Modbus Data.
- **Modbus Bridge:** Configure the EtherPAD for a Master or Slave Bridge which converts Modbus TCP/UDP to Modbus ASCII/RTU.

Hardware Options Available

- **Power Supply Adapter:** USA or Euro type.
- **DIN Rail Mounting Kit**
- **19" Rack Mounting Bracket:** Holds two EtherPAD Duos or Lites.
- **Digital I/O module:** 4x Digital Inputs (Dry Contacts), 2x Digital Outputs (jumper setting for Normally-Open/Normally-Closed), 1x Analog Input (4mA to 20mA).

Pin	Signal	Description	
1	TX+	OUT	TRANSMIT DATA
2	TX-	OUT	TRANSMIT DATA
3	RX+	IN	RECEIVE DATA
4, 5	NC	-	NO CONNECTION
6	RX-	IN	RECEIVE DATA
7, 8	NC	-	NO CONNECTION

Ethernet Interface Pin-out (RJ45)

Pin	Signal	Description	
1	NC	-	NO CONNECTION
2	NC	-	NO CONNECTION
3	TD	OUT	TRANSMIT DATA
4	GND	-	SIGNAL GROUND
5	RD	IN	RECEIVE DATA
6	NC	-	NO CONNECTION

Serial Configuration Interface Pin-out (RJ12)

Pin	Signal	Description	
1	CD	IN	CARRIER DETECT
2	RD	IN	RECEIVE DATA
3	TD	OUT	TRANSMIT DATA
4	DTR	OUT	DATA TERMINAL READY
5	GND	-	SIGNAL GROUND
6	DSR	IN	DATA SET READY
7	RTS	OUT	REQUEST TO SEND
8	CTS	IN	CLEAR TO SEND
9	RI	IN	RING INDICATOR

Serial RS232 Interface Pin-out (DB9)

Pin	Signal	Description	
1	CD	IN	CARRIER DETECT
2	RX-	IN	RECEIVE DATA NEGATIVE
3	TX-	OUT	TRANSMIT DATA NEGATIVE
4	DTR	OUT	DATA TERMINAL READY
5	GND	-	SIGNAL GROUND
6	DSR	IN	DATA SET READY
7	TX+	OUT	TRANSMIT DATA POSITIVE
8	RX+	IN	RECEIVE DATA POSITIVE
9	RI	IN	RING INDICATOR

Serial RS422/RS485 Interface Pin-out (DB9)**Part Numbers****EtherPAD Duo:** ETM2DSELDC240402**Euro Power Adapter (220V):** PSUF-EU-12VDC**US Power Adapter (120V):** PSUF-US-12VDC**Scripting:** SFW-S01**Logging:** SFW-L01**Routing:** SFW-RT01**PPP:** SFW-PPP01**Modbus Scripting:** SFW-MB02**Modbus Bridge:** SFW-MB01**DIN Rail Mounting Kit:** DK-01**19" Rack Mounting Kit:** RAK-01**Contact Details**E-mail: info@multenet.comWeb site: <http://www.multenet.com>

Product specifications are subject to change without notice