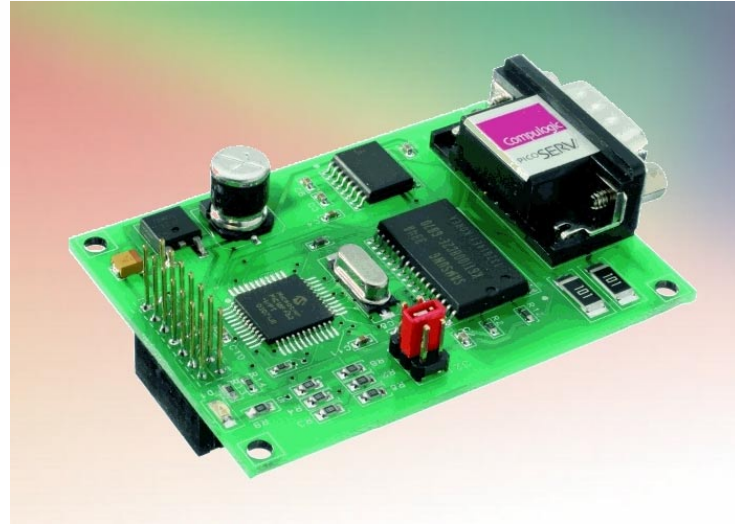




## Serial IO and Terminal Emulator Module

**Part of the family of IO expansion modules for the PicoServ miniature web server system, the serial IO module provides a means of transferring data to and from a serial port device using a web browser, mobile phone or SNMP network management system.**



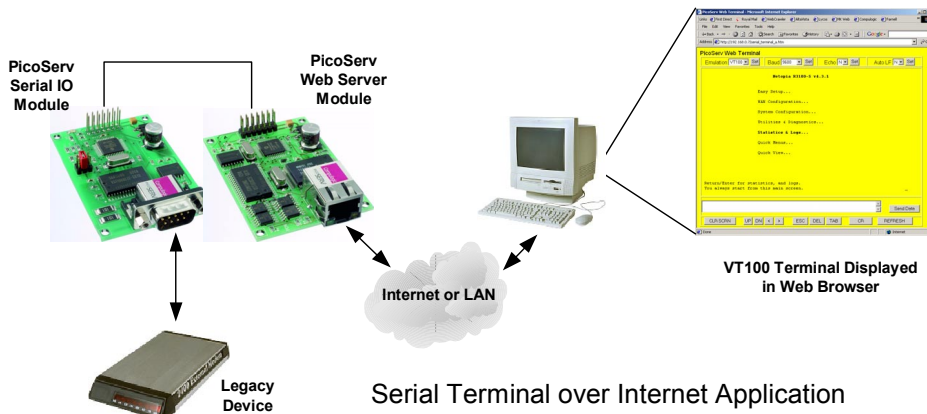
The serial I/O module stacks directly onto the PicoServ web server or SMS module to provide remote connectivity to devices using an RS232 serial port. A terminal emulation mode allows the control of legacy devices which normally require the direct connection of a VT100 or similar terminal to the device. Up to 8 serial I/O modules can be connected to one PicoServ web server module. Three basic modes of operation are provided:

### Direct or Raw Mode

In this mode serial data can be sent directly from a web browser, NMS or mobile phone to any of the RS232 serial ports (serial I/O modules) in a PicoServ system. Serial data received from connected devices is buffered in the serial I/O module and can be requested and displayed in a web browser or mobile phone via an SMS text message.

### VT100 or Dumb Terminal Emulation Modes

A built-in VT100 terminal emulator stores a virtual screen image within the serial I/O module. The screen image can be displayed in a web browser thus turning the browser into a virtual VT100 terminal. This mode therefore provides a convenient way to manage legacy VT100 compatible devices or systems remotely via a network or the Internet.



## Specifications

### Interfaces

#### **RS232 Serial interface**

Format: 8 data bits, no parity,  
Baud rates: 2400, 4800, 9600, 19200, 38400,76800, 102400bps.  
Connector: 9 pin male 'D' type connector

#### **I2C Serial bus interface**

Used for parameter and data exchange between The SMS Gateway module and PicoServ web server or I/O modules.  
Conforms to Philips I2C bus specification.  
Speed: 750Kbps.  
Addresses: up to 8  
Connector: 14 pin 0.1" male header.

### Terminal Emulation

**VT100** VT100 compatible emulation mode, 25 lines x 80 column virtual terminal

**Dumb Terminal** Dumb terminal emulation, 25 lines x 80 column virtual terminal  
Configurable tabs stops, auto line feed, local echo

### Raw Mode

Serial Input Buffer 8Kbytes  
Read Data Length User specified, 1 to 255 character per read operation  
Serial Output Buffer 8Kbytes  
Write Data Length up to 255 bytes per write operation  
Password protection Yes, optional

### Electrical

Power requirements 6-28 VDC, 40mA  
Power consumption 280mW

### Environmental

Operating Temperature 0 - +70oC  
Storage Temperature -40 - +100 °C  
Humidity 0-95% non-condensing

**Dimensions** 70mm x 50mm x 16mm (2.75" X 2" X 0.625")



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