

## Features



10/100BaseT Ethernet port



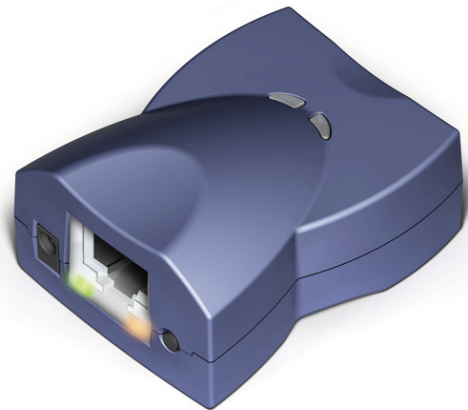
One RS232 port



Compact (60x47x30mm)



Wide supply voltage (10-25V)



## About

The DS203 is a serial device server that can be used to quickly network-enable virtually any serial device or system. Compared to the original DS100 converter, the DS203 is smaller, faster, and has a larger memory.

The DS203 is offered with Tibbo Device Server Toolkit software, which includes Virtual Serial Port Driver for Windows and Linux.

This product can also be supplied (loaded) with TiOS firmware and work as a simple BASIC-programmable controller.

## Specifications

- 10/100BaseT, auto-MDIX Ethernet port.
- One RS232 serial port (TX, RX, RTS, CTS, DTR, DSR).
- Two status LEDs on the RJ45 jack.
- Two Ethernet status LEDs on top of the device.
- Power: 10-24V (12V nominal).
- Dimensions: 60x47x30mm.
- Firmware is upgradeable through the serial port or network.
- Optional accessories:
  - DMK1000 DIN rail mounting kit.
  - 12V/0.5A adaptor: APR-P0011 (US), APR-P0012 (EU), APR-P0013 (UK).
  - WAS-1499 straight Ethernet cable (for this device can be used as crossover cable too).
  - WAS-P0004(B) DB9M-to-DB9F serial cable (device-to-PC).
  - WAS-P0005(B) DB9F-to-DB9F serial cable (device-to-device).

## Serial-over-IP Firmware

- Full- and half-duplex serial port modes.
- Server, client, and server/client network ("routing") modes.
- 8KB data buffers (one in each direction).
- Configuration stored in the EEPROM.
- Detailed status indication status indication via LEDs.
- Setup through the serial port or network (UDP, Telnet).
- Remote control of RTS, CTS, DTR, and DSR lines.
- "On-the-fly" commands for immediate serial port configuration.
- Serial-side "modem" commands for network connections control.
- Direct control of ADSL modems.
- Supports UDP, TCP, ARP, ICMP (ping), DHCP, PPPoE, LCP.

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## Programming

### Platform Objects

- Sock — socket comms (up to 16 UDP, TCP, and HTTP sessions).
- Net — controls Ethernet port.
- Ser — up to 4 serial channels (UART, Wiegand, and clock/data modes).
- Stor — provides access to the EEPROM
- Romfile — facilitates access to resource files (fixed data).
- Pat — “plays” patterns on up to five LED pairs.
- Button — monitors MD line (setup button).
- Sys — in charge of general device functionality.

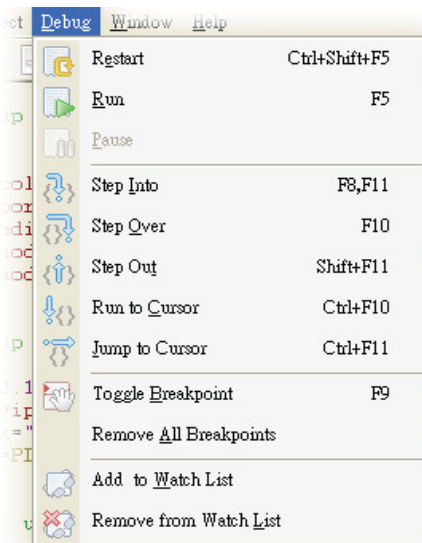
### Function Groups

String functions (21 in total!), date/time conversion functions, and hash calculation functions (md5 and sha1).

### Variable Types

Byte, char, integer (word), short, boolean, string, plus user-defined arrays and structures.

## Tibbo Integrated Development Environment (TIDE)



All BASIC-programmable Tibbo devices are provided with free TIDE software.

### Code in Comfort

Enjoy a modern code editor supporting syntax highlighting, context help, code hinting, and auto-completion.

### Debug with Ease

Set breakpoints, watch variables, inspect the stack, step through your code... the built-in debugger in Tibbo IDE provides all the tools for fast and convenient debugging.

Our debugger does not rely on any special hardware like an ICE machine or a JTAG board. Simply connect your Tibbo device to the Ethernet, select it in the IDE, and you are all set!

For more information on TIDE, see <http://basic.tibbo.com/product/tide.html>