

IP Relay ER02a

Remote RS-232/485 serial port, 2x 230V-rated relay, Ethernet

IP Relay ER02a is a RS-232 / RS-485 serial line converter with two 230V-rated SPDT relays.

The contacts and the serial line can be controlled using the free HW VSP (virtual serial port) software, or using the documented M2M protocol. The communication protocol is based on Telnet and RFC2217 extensions.

HWg SDK gives examples, in several programming languages, of using IP Relay in your software and applications.



- Industrial model, fits on a DIN rail
- Two contacts rated at 230V / 16A
- Remote RS-232 serial port

IP Relay applications

- IP Relay used as an Ethernet/RS-485 converter, optionally switching power on and off.
 - Access control systems
 - Barcode readers
 - Electronic scales
 - RFID interfaces, fingerprint scanners
- Remote monitoring of Ethernet devices over a serial console, Ethernet-commanded RESET if needed.
Remote reset can take place by shorting an internal reset button, or by disconnecting 110/230V power supply. Contacts of IP Relay ER02a are certified for switching mains power.
- Commonly used to connect an IP video camera and restart it remotely when needed.

Note: The relay is controlled with Ethernet commands. It is not an autonomous device. If you need a unit that will autonomously monitor other devices, use the **IP WatchDog**, which monitors up to 2 servers using a serial connection, ICMP PING, or WWW access.

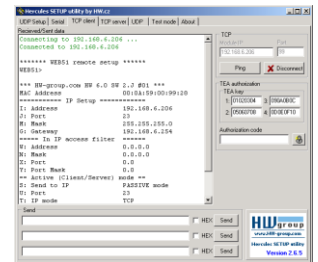
Easy to use
<ul style="list-style-type: none"> • HW VSP Single license contains a tab to control the relay directly • Outputs can be tested / controlled with check boxes at the Test tab in the Hercules utility • The M2M protocol is fully documented • Output states indicated at the device • Over 20 examples for 5 programming languages in HWg SDK

SW applications

- **Virtual Serial Port (HW VSP)** for Windows 2000/XP/Vista. The Single version of HW VSP is free of charge.
 - HW VSP works as a NT service (can be used on Windows servers).
 - HW VSP is offered with a Single license (for a single device) or a Multi license (up to 64 virtual ports on a single PC, with up to 64 IP Relays, PortBox, I/O Controller or PortStore units connected to them).



- **Hercules** – Debugging and testing utility, native IP Relay support.
- **IPRC** – Relay control utility for Windows – switch a relay with a single click.
- **HWg SDK examples**
Software Development Kit is available for download free of charge.



- EX01: UDP Setup (Borland C++ Builder, MS Visual C, VB, Delphi, C#)
- EX02: I/O Controller (Borland C++ Builder, MS Visual C, VB, Delphi, C#)
- EX03: Control Remote Serial Port (Borland C++ Builder, MS Visual C, VB, Delphi, C#)
- EX13: TCP Setup (Borland C++ Builder, MS Visual C, VB, Delphi, C#)

Specifications

- **Ethernet:** RJ45 – 10BASE-T / 10 Mbps
 - **Protocols:** TCP/IP, UDP/IP, Telnet+RFC2217
 - **TCP modes:** TCP Server and TCP Client/Server
- **Outputs:** Two built-in SPDT relays (250V / 16A max)
- **Serial port:** RS-232 (Cannon DB9M - Rx/D, Tx/D, CTS, RTS, GND)
 - Serial port can be switched to RS-485 mode (terminal block, optional line termination)
- **Device configuration**
 - **RS-232 Setup** (via serial port using any terminal, 9600 8N1)
 - **UDP Setup** (basic network parameters – UDP Config / Hercules utilities for Windows)
 - **TCP Setup** (remote terminal-based configuration over TCP)
- **Security:** Authorized IP range / TEA (128B) authentication
- **Power:** 8–24VDC / 0.2A (barrel connector, terminal block)
- **Dimensions:** 25 x 82 x 90 [mm]
- **Mounting:** DIN rail, wall mount

