Model Information

Features

- Controls 2 Modbus lines located virtually anywhere via Ethernet, WLAN or Internet
- GigaLAN 10/100/1000 Ethernet
- Configuration over WEB Browser
- Supports Modbus Master Multiplexing
- Supports TCP/IP, DHCP, ICMP, HTTP, DNS
- Supports ART (Automatic Receive Transmit control)
- RS232/422/485 interface selected by Software
- Optional: Wireless network IEEE 802.11b/g/n

Contact Online...

ModGate Plus 213

Quick Link: | Features | More Pictures | Overview | Interface | Serial Performance | Operating Modes | Power and Environment | Special Features | Security | Ordering Information | Options | Packaging |

More Pictures




Click on the thumbnails for the large picture ...

>Back to top

Overview

The Modgate Plus (or Modgate+) are easy to use Gateways from Modbus/TCP on Ethernet or WLAN to Modbus/RTU or Modbus/ASCII on the serial ports. Modgate+ 213 connects two Modbus serial lines to a network running TCP/IP. Metal case, wide temperature range and flexible DC power supply classify the Modgate+ as industrial-strength devices. They are based on a state-of-the-art RISC processor, to provide cost-effective design and low power consumption.

Using TCP/IP the Modgate+ operate without limitations on distance or OS platform, the Gateways are usable via Internet and VPN connections. The serial port is configured for Modbus/ASCII or Modbus/RTU and physically set to RS232, RS422 or RS485 operation. The messages received on the network are sent to the serial line, messages from the serial port are sent via network. Modgate+ automatically adjusts as Master or Slave on the serial port.
Modbus Master Multiplexing is implemented as an extension to the standard. Several masters connect to Modgate+ by Modbus/TCP, slaves on serial lines may answer requests from multiple masters.

The configuration of Modgate+ is done via browser. The user interface is based on Web 2.0 to provide an easy handling of the options. UPnP provides a simple and standard way to find the Gateway in the network.

Modgate+ devices can be ordered with an embedded module for WLAN 802.11b/g/n.

Interface

Ethernet interface	Auto-detecting 10BaseT/100BaseTx/1000BaseT (GigaLAN) Connector 8P8C (RJ45)
Wireless interface	Optional, uses IEEE 802.11b/g/n as Access Point or Client Embedded module or USB expansion available

Protocols	TCP/IP, DHCP, ICMP, HTTP, DNS, UDP, UPnP/SSDP, Modbus/TCP, Modbus/RTU, Modbus/ASCII
Serial interface	RS232/422/485 selected by software
No. of port	2x DSUB 9 male connector (as PC)
Available Modes	• RS232 full duplex • RS422 full duplex • RS485 4 wire, full duplex • RS485 2 wire, half duplex
Signals	• RS232: TxD,RxD, RTS,CTS, DTR,DSR, DCD, RI, GND • RS422: Tx+/-, Rx+/-, GND • RS485 2 wire: Data+/-, GND • RS485 4 wire: Tx+/-, Rx+/-, GND
RS485 Data control	Controlled by ART (Automatic Receive Transmit control)
Expansion port	USB 2.0 High Speed, for WLAN

>Back to top

Serial Performance

Speed	up to 115.2 kbps for Modbus RS232: up to 1000 kbps, RS422/485: up to 3.7Mbps
Parity	None, even, odd, mark, space
Data bits	7, 8
Stop bits	1, 2

>Back to top

Operating Modes

Modbus RTU / ASCII	Modbus RTU or Modbus ASCII protocol selected for each serial port individually
DirectMappingMode	Direct mapping of Modbus addresses to serial ports or TCP connections
PromiscousMode	Mapping of serial ports to TCP connections

>Back to top

Power and Environment

Connector	3-pin Terminal Block with Protective Earth
Power requirements	9 - 54V DC, 0.3A @ 12V, 4W
Dimension	115×73×25 mm³ (W×L×H)
Operating Temp	–20°C - 65°C
Storage Temp	–20°C – 85°C
Case	SECC sheet metal (1mm)
Weight	0.25kg
Mounting	• DIN Rail • Wall mount

>Back to top

Special Features

Installation	DIP switches set a defined temporary IP Address to contact via WEB Browser
	Promiscous Mode Messages received from the network are sent to defined serial ports, messages from the serial port are sent to defined connected network host.

Operating mode	Mapped Mode Received messages are scanned for their target address. This address is found in a table, the message is sent to the defined connection (serial or TCP).
Modbus Master Multiplexing	An extension to the standard. Slaves on serial lines may answer requests from multiple masters. The masters connect to ModGate+ by Modbus/TCP.
Configuration	Configuration over WEB Browser
Detection	Announces presence in the network via Universal Plug and Play (UPNP) protocol
DNS	Domain Name Server support
Serial Interface	Serial Interface configurable by software This also enables internal Termination for RS485
Firmware	Firmware update over WEB Browser
LEDs	LEDs for Power, Ready, WLAN, serial Tx, Rx, Ethernet Link, Speed

>Back to top

Security

Password access	Webinterface is password protected. The password can be changed in the Webinterface.

>Back to top

Ordering Information

6720	ModGate Plus 213 (2x RS232/422/485)

>Back to top

Options

6689	WLAN Kit internal internal module 802.11b/g/n, pigtail and antenna Purchase time option, not for later retrofitting
6690	WLAN Kit external USB stick 802.11b/g/n, antenna
6031	Power supply adapter 12V DC, 1A
661	Serial Null-Modem adapter 9PF-9PF, change male to female
6692	DK-NCP DIN-Rail mounting kit
6693	WK-NCP Wallmount kit

>Back to top

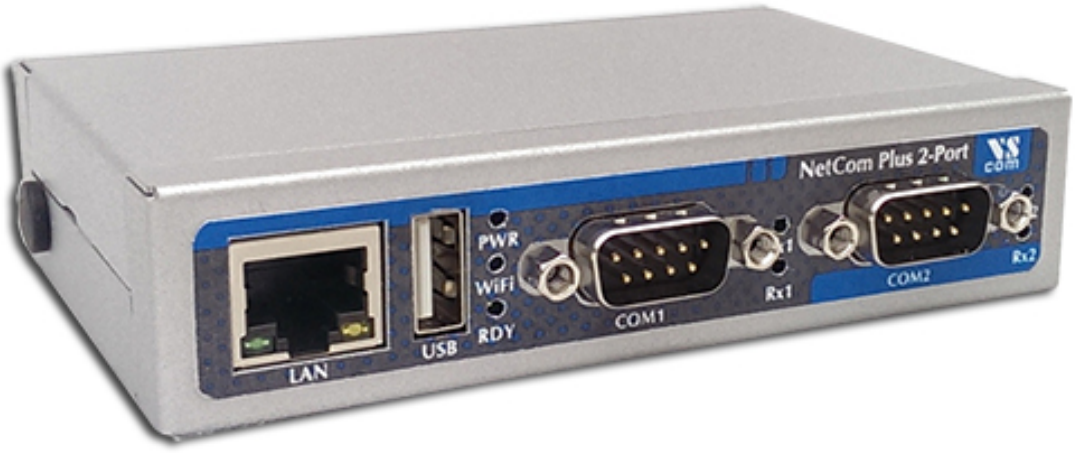
Packaging

Packing list	• ModGate Plus 213 • Terminal block for Power Supply • CD-ROM with user manual

>Back to top

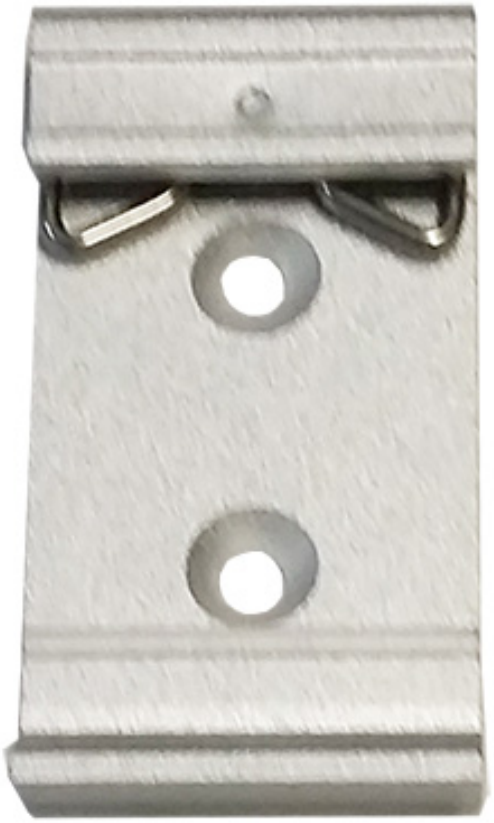
ModGate Plus 213

>Back



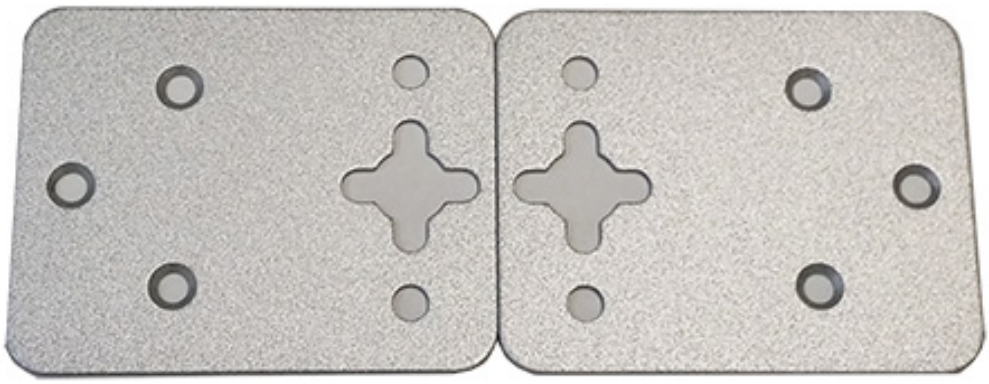
DIN-Rail Mounting Kit

>Back



Wall Mounting Kit

>Back



ModGate Plus 113 on DIN-Rail,
ModGate Plus 213 is similar

>Back