

Sym-o-net

USE REMOTE RS-232 DEVICES LIKE THEY WERE LOCALLY
CONNECTED TO YOUR COMPUTER

By Symmetron

Sym-o-net is an enhanced functionality GSM/GPRS modem. It allows remote connection with up to 3x RS-232 devices.

Peripherals (DEVICE serial ports) appear as directly connected to a PC physical COM port.

OPERATION MODES

- GPRS client. On-line connection. Works with low-cost Dynamic IP SIM cards. Uses Diameson tunnel server (see page 3).
- GPRS server. On-line connection. Works with Static IP SIM cards (see side bar).
- GSM modem (CSD phone call). On-demand connection (see side bar).
- Master-Slave (virtual RS-485 bus). One Master has access to multiple Slaves, located anywhere in the world. Uses Diameson tunnel server and SymonetCOM Port Connector (see page 4).
- 1-to-3, RS-232 multiplexer (see side bar).

APPLICATIONS

- Data acquisition networks.
- Upgrade legacy software, which communicate with serial devices only locally, to allow operation of serial devices via the GSM or GPRS network.
- Data emailing from Stylitis-41/101 data loggers.

SPECIFICATIONS

- Serial port baud rate selectable from 1200 to 38400 baud (default at 9600 baud).
- RS232 ports flow control support: None, XON/XOFF, RTS/CTS.
- Real-time clock with Lithium battery backup.
- Operation status indicated by 4 red LEDs. The green LED indicates the operation status of the internal modem.
- Power supply: 12~18 VDC. Consumption: 4 mA modem off, 12 mA when idle (AUTO).
- Temperature range: -30 to +70 °C. Dimensions (W x D x H): 140 x 110 x 35 mm.

FEATURES

- Free virtual COM port software.
- Fully remotely programmable.
- Individually programmable access times for each serial device.
- On-demand connection of any device to modem via remote commands.
- On-demand connection of any device to modem, via a command, locally or remotely.
- Accepts RTS requests from devices connected to any peripheral port, usually to send an SMS, such as Symmetron's Tiltometer, and serves them one by one.

BENEFITS

- Use low-cost dynamic IP SIM cards to allow continuous on-line data transmission.
- Via the Master-Slave feature, each device of the virtual RS-485 network can be located anywhere in the world.
- Only for the 3-device version: Benefit by paying for one SIM card and remotely connect to multiple RS-232 Devices.

ADDITIONAL FEATURES FOR STYLITIS-41/101 DATA LOGGERS

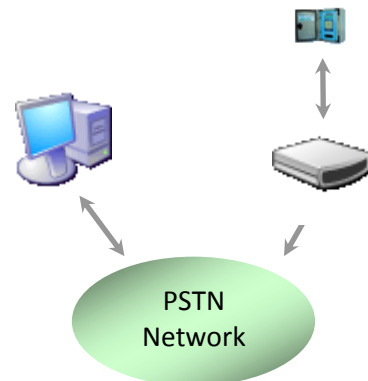
- Replies to SMS message with instantaneous Counter and Analog channel data.
- Encrypted emails with logger data. Emailing interval is programmable.

INTEGRATED SYSTEM

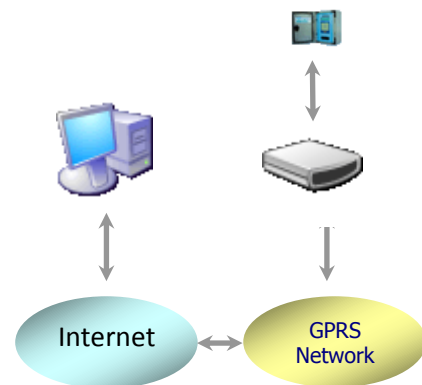
Part of a complete system, Sym-o-net collaborates with other Symmetron products:

- **Diameson** – Tunnel server software that allows on-line connections in GPRS networks.
- **Opton 4** – data and data logger management software.
- **AutoConnect** – automatic connection and download software.

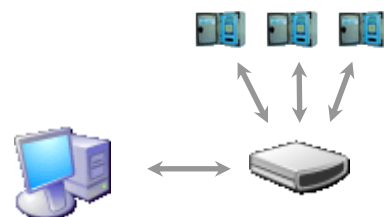
For detailed specs please refer to individual product data sheets.










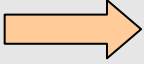
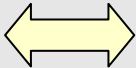


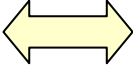
CSD phone call (modem to modem)



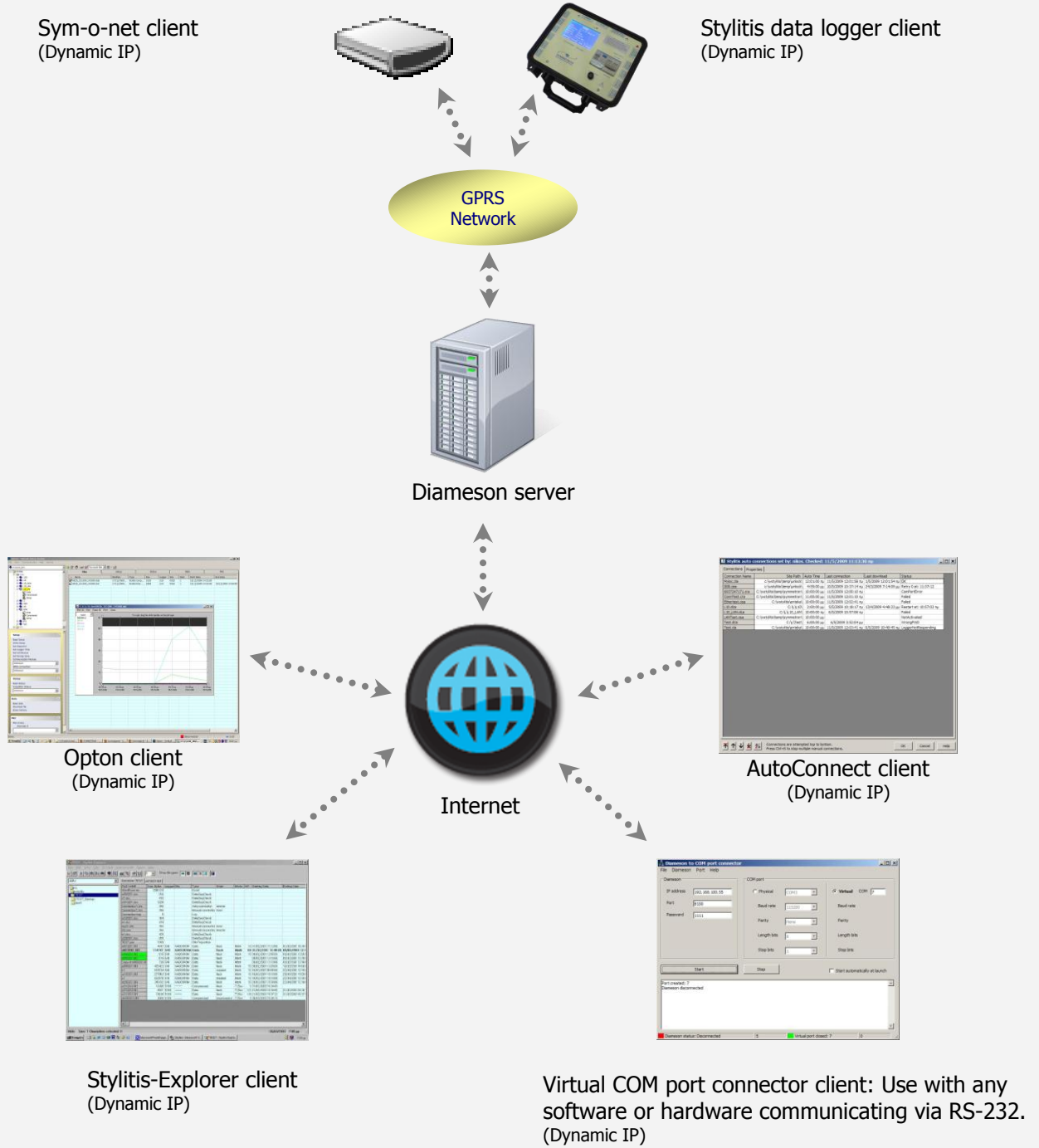
GPRS Server using static IP SIM card



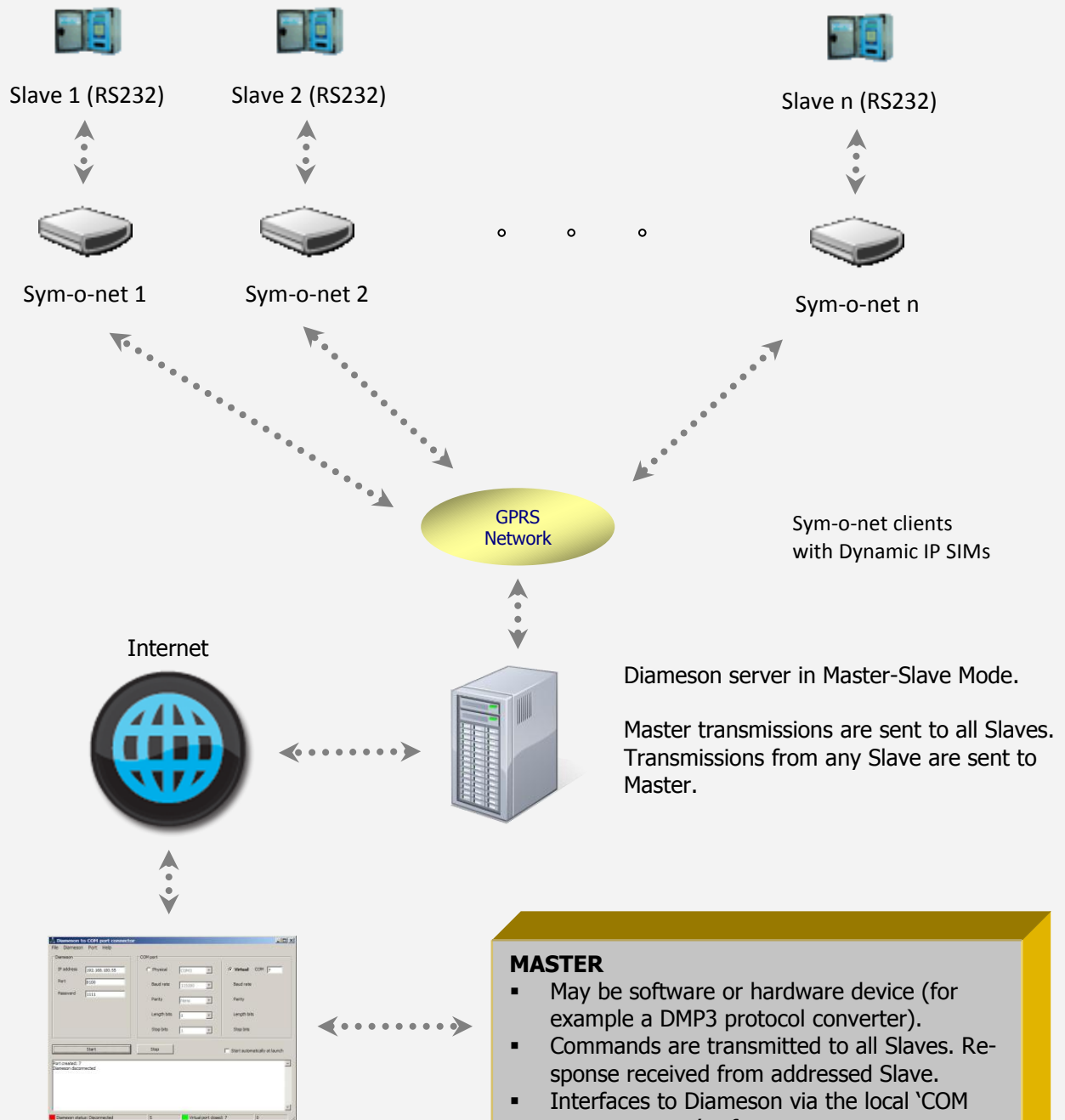
3 device version: 1-to-3, RS-232 multiplexer

	<i>Feature</i>	<i>Benefit</i>
	Built-in GSM/GPRS Quad-band modem.	Worldwide network compatibility.
	GPRS connections with low cost, dynamic IP SIMs.	Connections via Diameson GPRS Gateway, are possible without expensive static IP SIM cards.
	Free software creates local virtual COM ports in computer.	Use HyperTerminal or any other software interfacing via physical COM ports to establish communication with remote serial device.
	Internal real-time clock allows automatic, transparent, device-to-modem connection at programmed time.	For instance, DEVICE 1 may be remotely available between 10:30 to 11:50. For the 3-device version, DEVICE 2 or 3 may be available between 15:00 to 18:00, etc. Active peripheral DEVICE port may be changed while connected. To conserve power, modem is switched off when no DEVICE port is active.
	<u>Only for the 3-device version:</u> 3x built-in RS-232 DCE serial ports (DEVICE ports) for connection to peripheral serial devices.	Network-enable legacy software and RS-232 devices. Benefit by paying for one SIM card and remotely connect to multiple RS-232 Devices.
	1x built-in RS-232 DTE serial port (MASTER port) for connection to PC for programming its setup.	<u>Only for the 3-device version</u> : You can also use it as a serial router i.e. to connect up to 3, RS-232 devices to one PC.
	Remotely programmable.	Use the Sym-o-net wizard to setup all options.
SMS 	SMS alerts.	Sends SMS to specified phone number if power supply is found low.
RTS 	RTS requests service	Serves RTS requests by any peripheral device(s), usually to send an SMS, such as Symmetron's Tiltometer.
	<u>Stylitis-41/101 only:</u> Automatic data emailing via GPRS.	Programmable data and status emailing. Emails are encrypted for data safety.
	<u>Stylitis-41/101 only:</u> Automatic data downloading via GSM/GPRS.	Compatible with AutoConnect, Symmetron's auto-download software.
SMS 	<u>Stylitis-41/101 only:</u> Replies to SMS messages.	Check instantaneous Counter and Analog values (first channels – A1 and C1) from cell phone.

GPRS client via Diameson (using Dynamic IP SIM card)



Master-Slave GPRS network via Diameson (Virtual RS-485 bus)



COM port connector client: Use with any software or hardware communicating via RS-232. (Dynamic IP)

0710