● Ethernet-Adapter for the control and the management of UPS Facilities

CS141L

CS141SC

CS141 Professional

CS141BL

CS141BSC

CS141 BUDGET

CS141LM

CS141SCM

CS141 MODBUS

CS141R_II

CS141MINI

CS141 R_II & MINI

Features

● **High-tech made in Germany and the USA!**
The most powerful and flexible UPS management card worldwide! The CS141 is delivered with an ARM Cortex A8 CPU, 10/100Mbit Auto-sensing Ethernet, 3 serial RS-232 Interfaces (not BUDGET version), 1 USB Port, AUX port for connecting an external interface Card with 4 dry-contact, external alarms output/input or a BACS System. The device is also available with a MODBUS RS485 interface instead of the RS232 interface.

● **Grafical interfaces**
Several options are available for monitoring and configuring the CS141: every type of SNMP network management station, internet browsers and UNMS II. The statistical analysis is grafically shown through the web browser. Those statistics show the values of the UPS and all connected external devices like temperature-, humidity sensors, etc.

● **Universal suitable for every type of UPS devices except HUAWEI and GAMATRONIC**
Supports more than 1400 UPS types from 100 UPS manufacturers. The incorporation of RS-232 protocol and support of dry contacts makes the monitoring of any device possible.

● **Scheduler**
Web server based scheduler allows scheduled on/off of the UPS output or SITESWITCH p or to start battery tests. This secures that the UPS runs regularly battery tests and informs the user about problems via email, log file etc.

● **Data logging**
Measurement values and alarms are written with time stamps into the non-volatile storage of the CS141 adapter. The time synchronization function insures that all protocols are written with precise time values.

● **Grafical operation and statistics**
The CS141 WEB-Server provides a simple to use overview for a broad range of functionality within its monitoring and configuration capabilities.

● **Email/SMS**
Integrated email client via SMTP can be configured to relay either all or UPS messages. The email client can also make the use of network messaging options for distributing information or use network internal email facilities. Compatible with SMTP email systems such as MS Exchange, Lotus, and many others.

● **Email Trap for UNMS Remote Monitoring**
Every CS141 can send its data packages via *Email Trap* to the UNMS II Software with TELESERVICE module. Thereby you can arrange a remote monitoring via email. All measuring values and graphics are visible on the UNMS II at any time.

● **Multiserver Shutdown**
Unlimited shutdown manager for RCCMD clients – for more than 40 different operating systems. This makes it possible for a CS141 adapter to inform and shutdown any type of computer in a given network which can then be used to centralize the administration of large networks while greatly reducing both the amount of administrative work and the amount of network traffic. Different options are available for conducting shutdowns and system start ups:
Cold boot (computers are directly cut-off from or connected to the power supply. This option may require a SITESWITCH.
Warm boot (using RCCMD operating systems are prompted to shutdown or restart).
Wake On LAN (using data packages other computers in a local network are prompted to start-up).

● **Network Services**
UPSMAN compatible software for the alarm management. Supports SNMP, IPv6, HTTP, HTTPS, Telnet, DNS, SMTP, NTP, FTP, UPSTCP (UNMS), RADIUS , PPP, MODBUS over IP, MODBUS/PROFIBUS over RS232/485, BACnet over IP (PRO models only, extra hardware needed) and RCCMD (Multiserver/Multi-OS shutdown/ messaging tool).

● **GSM-MODEM (option)**
Support for GSM Modems for the remote monitoring and administration of UPS and other connected GENEREX devices. The function makes administration of the UPS system possible without compromising the security of the network it is servicing.

● **SNMP**
The CS141 supports the RFC1628 MIB (Standard UPS MIB) and MIB extensions for use with the SITEMANAGER, SITESWITCH 4, and SENSORMANAGER. This enables the CS141 adapter to make all of its gathered information from other devices available via SNMP. All SNMP based network-management systems are supported.

● **BACS Battery Management System (option)**
The CS141 based BACS WEBMANAGER is the ultimate version of the CS141 range and adds a battery management functionality to your system. A possible failure of your UPS batteries is now under your control.

● **MODBUS**
All of the CS141 adapters are equipped with MODBUS-over-IP, which enables the CS141 to incorporate PLC devices (SPS) like those from Schneider Group. The CS141 devices with a COM2 port possess MODBUS over RS232 additionally. The CS141 devices LM or SCM provide MODBUS over RS485.
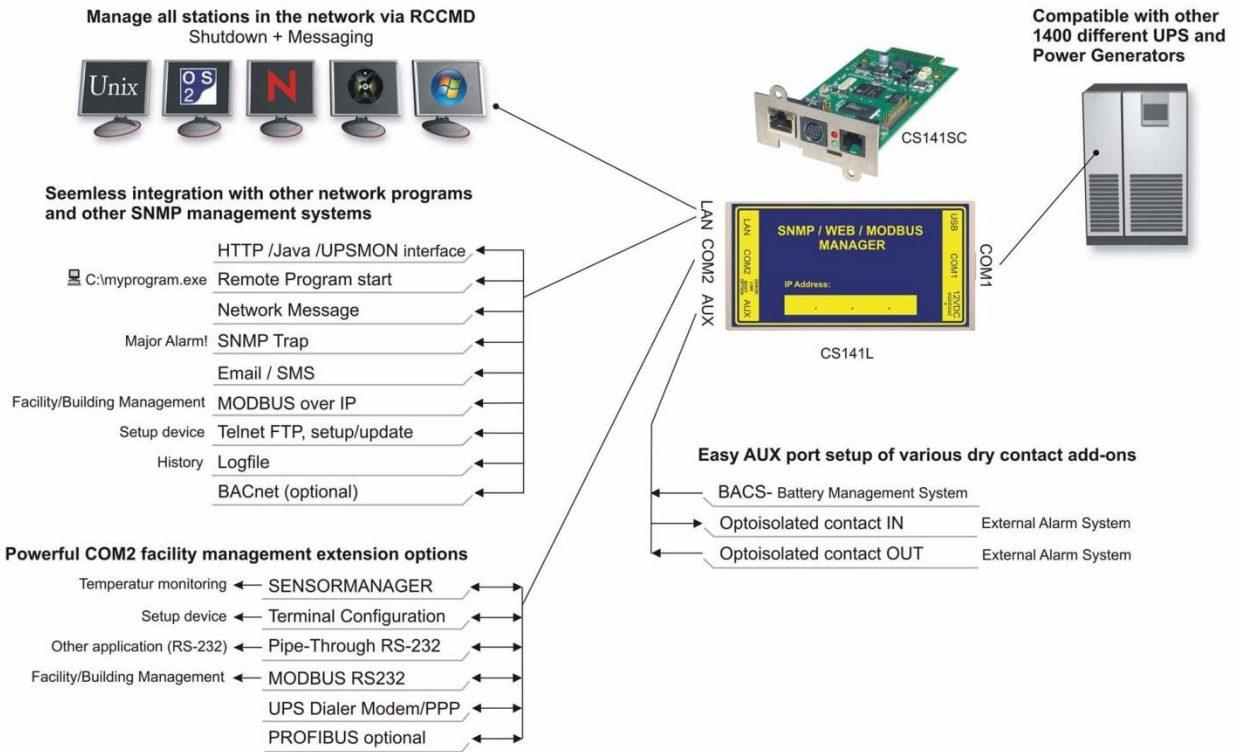
● **Sensormanager (option)**
The Sensormanager supports 8 analog inputs for measuring sensors (e. g. temperature, humidity, etc.), 4 digital inputs for alarm detectors (e. g. smoke, fire, water, etc.) and 4 digital outputs (e. g. audible and optical alarm indicators, etc.)

● **Analog IO**
It is possible to connect an Interfaceboard to the AUX-port to control 4 analog Inputs or Outputs with the CS141.
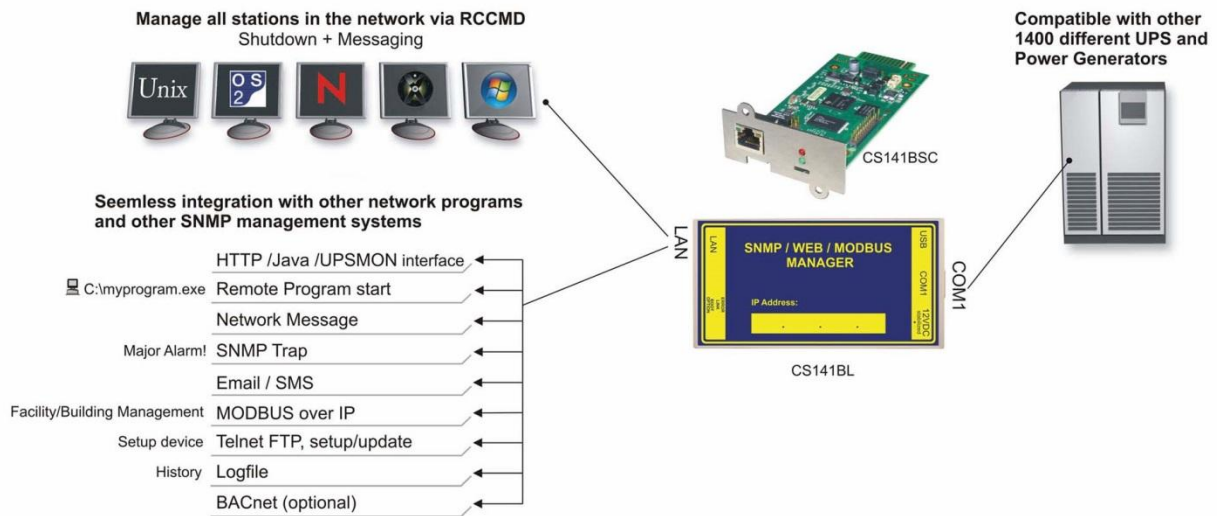
Function Overview of the CS141 Professional

Technical Data of the CS141 Professional

	CS141 Professional External (all UPS vendors)	CS141 Professional Slot (all UPS vendors with SC slot format)
Power supply	12V (min. 9V, max. 30V DC), 120 mA	12V (min. 9V, max. 30V DC), 120 mA
Size (W x L x H), weight	69 x 126 x 35mm, 210 g	60 x 120 x 29mm, 66 g
Ethernet	10/ 100Mbit Base-T auto sense	10/ 100Mbit Base-T auto sense
RS-232 Interface	3 (2 CS141LM)	3 (2 CS141SCM)
RS-485 Interface	Optional	Optional
USB-Interface	1	-
MODBUS over IP	Standard	Standard
Status LED's	normal green, boot/error red	normal green, boot/error red
User manual	German, English	German, English
MIB	RFC 1628 und and private extension	RFC 1628 und and private extension
Operating temperature	0 – 70 °C	0 – 70 °C
Storage temperature	0 – 70 °C	0 – 70 °C
CPU	ARM Cortex A8 800 MHz	ARM Cortex A8 800 MHz
Flash Memory	512 MB	512 MB
Access memory	128 MB DDR3 RAM	128 MB DDR3 RAM
Humidity	20-95%, not condensated	20-95%, not condensated
Certification	CE, UL/NEMKO in preparation	CE, UL/NEMKO in preparation
MTBF (EN/IEC 61709)	CS141L: 849.192 hours (96,9 years)	SC141SC: 874080 hours (99,8 years)
	CS141LM: 844.138 hours (96,4 years)	CS141SCM: 871.680 hours (99,5 years)
Warranty	2 years	2 years

Function Overview of the CS141 BUDGET

Manage all stations in the network via RCCMD
Shutdown + Messaging

Compatible with other 1400 different UPS and Power Generators

Seemless integration with other network programs and other SNMP management systems

	HTTP /Java /UPSMON interface
C:\myprogram.exe	Remote Program start
	Network Message
Major Alarm!	SNMP Trap
	Email / SMS
Facility/Building Management	MODBUS over IP
Setup device	Telnet FTP, setup/update
History	Logfile
	BACnet (optional)

SNMP / WEB / MODBUS MANAGER
IP Address:

CS141BSC
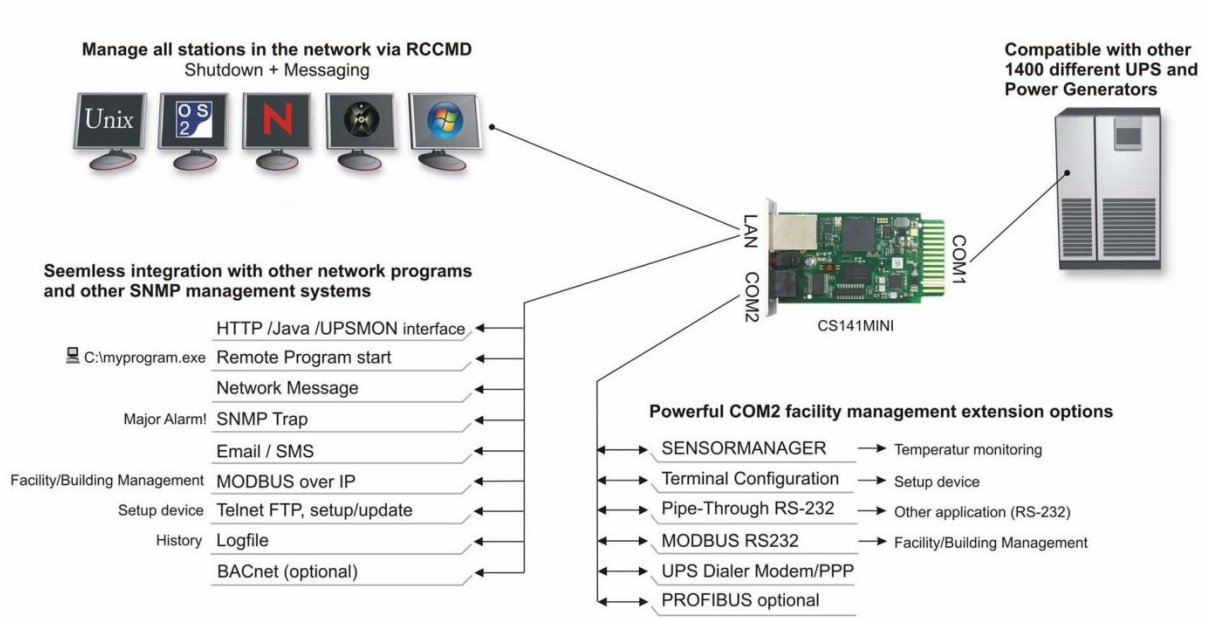
CS141BL

LAN

Technical Data of the CS141 BUDGET

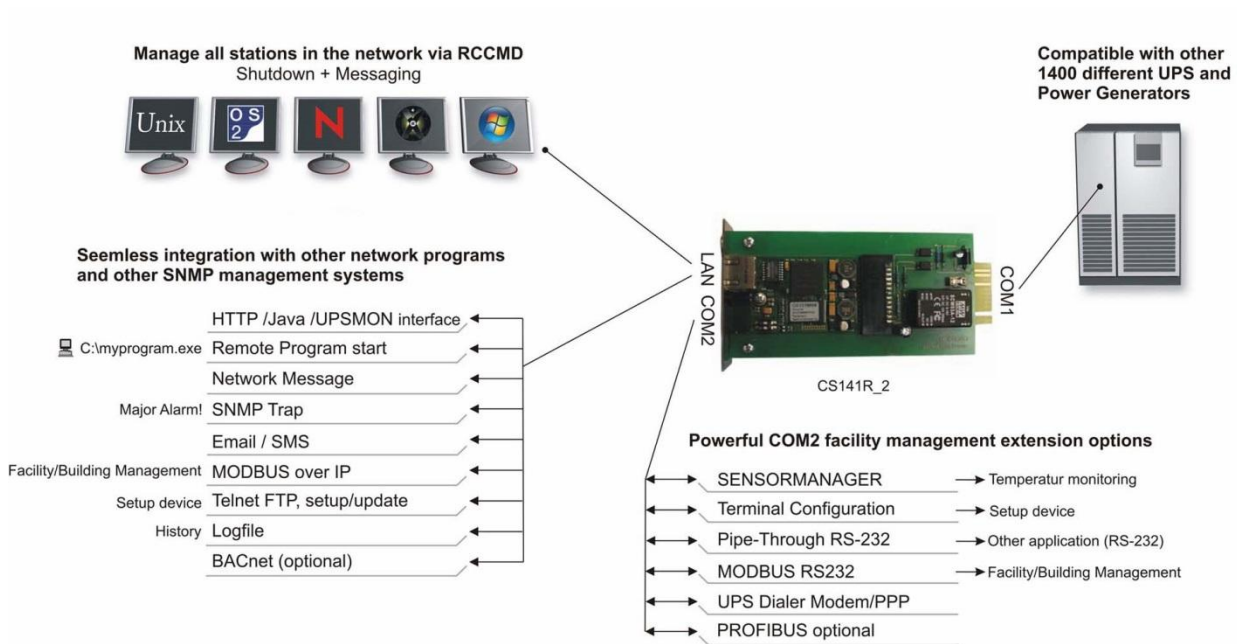|	CS141 BUDGET External (all UPS vendors)	CS141 BUDGET Slot (all UPS vendors with SC slot format)
Power supply	12V (min. 9V, max. 30V DC), 120 mA	12V (min. 9V, max. 30V DC), 120 mA
Size (W x L x H), weight	69 x 126 x 35mm, 210 g	60 x 120 x 29mm, 66 g
Ethernet	10/ 100Mbit Base-T auto sense	10/ 100Mbit Base-T auto sense
RS-232 Interface	1	1
USB-Interface	1	-
MODBUS über IP	Standard	Standard
Status LED's	normal green, boot/error red	normal green, boot/error red
User manual	German, English	German, English
MIB	RFC 1628 und and private extension	RFC 1628 und and private extension
Operating temp.	0 – 70 °C	0 – 70 °C
Storage temp.	0 – 70 °C	0 – 70 °C
CPU	ARM Cortex A8 800 MHz	ARM Cortex A8 800 MHz
Flash Memory	512 MB	512 MB
Access memory	128 MB DDR3 RAM	128 MB DDR3 RAM
Humidity	20-95%, not condensated	20-95%, not condensated
Certification	CE, UL/NEMKO in preparation	CE, UL/NEMKO in preparation
MTBF (EN/IEC 61709)	884.463 hours (101 years)	909.620 hours (103,8 years)
Warranty	2 years	2 years

Function Overview of the CS141 MINI

Technical Data of the CS141 MINI

	CS141 MINI Slot **(all UPS vendors with Mini slot** **format)**
Power supply	12V (min. 9V, max. 30V DC), 120 mA
Size (W x L x H), weight	42 x 80 x 26mm, 36 g
Ethernet	10/ 100Mbit Base-T auto sense
RS-232 Interface	2
USB-Interface	-
MODBUS over IP	Standard
Status LED's	normal green, boot/error red
User manual	German, English
MIB	RFC 1628 und and private extension
Operating temp.	0 – 70 °C
Storage temp.	0 – 70 °C
CPU	ARM Cortex A8 800 MHz
Flash Memory	512 MB
Access memory	128 MB DDR3 RAM
Humidity	20-95%, not condensated
Certification	CE, UL/NEMKO in preparation
MTBF (EN/IEC 61709)	916.028 hours (104,6 years)
Warranty	2 years

Function Overview of the CS141 R_2

Technical Data of the CS141 R_2

	CS141 R_2 (all UPS vendors with RIELLO/AROS Netman slot format)
Power supply	12V (min. 9V, max. 18V DC), 120 mA
Size (W x L x H), weight	75 x 145 x 32mm, 92g
Ethernet	10/ 100Mbit Base-T auto sense
RS-232 Interface	2
USB-Interface	1
MODBUS over IP	Standard
Status LED's	normal green, boot/error red
User manual	German, English
MIB	RFC 1628 und and private extension
Operating temp.	0 – 70 °C
Storage temp.	0 – 70 °C
CPU	ARM Cortex A8 800 MHz
Flash Memory	512 MB
Access memory	128 MB DDR3 RAM
Humidity	20-95%, not condensated
Certification	CE, UL/NEMKO in preparation
MTBF (EN/IEC 61709)	916.028 hours (104,6 years)
Warranty	2 years