## CS141 HW161 WEBMANAGER<sup>®</sup>

#### Intelligent UPS- and Infrastructure Management



#### The world's most powerful and flexible UPS / Sensor / Battery Management controller and the only such device exclusively Made in Germany and Made in the USA – unique of its kind!

The CS141 / BACS is specially designed to provide for the secure remote monitoring of UPS products from a pool over 2000 distinct models, even in sensitive high security network networks, thus supporting almost all UPS manufacturers on the market today. The CS141 can be adapted without compromise to almost any operating environment, since in addition to the external box format, different card layouts are also available. If the card format does not fit, there is the possibility of a utilizing a special RFC-1628 interface in connection with private MIBs; direct integration via LAN is also available. The CS141 adapts itself transparently to the needs and requirements of the respective network: The CS141 supports special functions for easy and reliable remote monitoring solutions via email as well as special JSON data packets, which can be used for evaluation e.g. over our popular UNMS software. All common formats suitable for a comprehensive remote monitoring framework are available, including SNMP, SMTP, BACnet, Modbus via RS485/232 - Profibus / Profinet, LONbus, and other field busses are also supported. Thanks to the specially developed API, the CS141 can be integrated 100% into almost any existing infrastructure. Also, in terms of cybersecurity, the CS141 is at the forefront: The security concept meets and exceeds even the highest security requirements as accord to UL2900! CS141 offers compatibility to Gigabit networks and provides uncompromising security features such as freely definable user levels, password encryption, RADIUS, 802.1X. TLS/SSL, IPv4/IPv6, SNMP v2/v3. With these features, the CS141 guarantees secure operation in any and all modern networks!

GENEREX

#### The CS141 supports the monitoring of Environmental Sensors and the integrated management of 3<sup>rd</sup> party sensors of any kind over the highly secured interface, ensuring the sustained integrity of your Datacenter and the sustained reduction of overall operational costs!

Up your facility management game with intuitive combination sensors like the SM T H COM for temperature and humidity through complex sensor cascades with up to 8 analog sensors of different manufacturers through the power of the SENSORMAN-AGER. Assuming your chosen sensor has an output of 0-10Volt or 0-20mA, it can be managed by the CS141 with a SENSOR-MANAGER. Benefit from the multitude of freely available sensors on offer for every task, from diesel fuel level to air flow and pressure sensors! Even more: Combine individual measuring points of the different sensors as you like with the integrated event matrix and realize automatic counteractions with potential-free contacts for incoming alarms as well as switching relays; the potential-free contacts and alarm relays can be operated at a distance of up to 50 m from the CS141! Through use of an additional range extender, even distances of up to 1000 m are possible. Each CS141 Professional can also be enhanced with a BACS bus converter via its AUX interface, thus providing a solid basis for sustainable system planning: enable the battery management with up to 512 batteries of common chemistries (lead, NiCd, lithium) with a CS141/BACS: BACS is the most innovative and advanced battery management system on the market and already meets the new European regulatory standards for 2026 and is a "MUST HAVE" in any fully automated unmanned data center within the European Union and North America.

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# Secure the controlled shutdown of your most critical systems: RCCMD – the most trusted shutdown solution on the market.

One license is included with every CS141/BACS sold, and can often be found as an OEM feature bundled into many devices from third parties, such as RITTAL, HUAWEI, LEGRAND, AEG, SALICRU, and more!

RCCMD is a German-made shutdown and messaging tool boasting a streamlined almost 0% CPU capacity and network load; a small footprint product with a powerful functionality!

RCCMD is firmly established as an industry-trusted mainstay, and is a highly secured and stable software solution compatible with many OS and also VMWARE, MS HYPERVISOR, CITRIX and many other virtual OS. Particularly as a result of its unique status as the only such product NOT produced in China, you'll find CS141 devices complete with RCCMD on military, air traffic, medical, oil & gas and critical infrastructural installations across the globe.

Whether responsible for the management of a single UPS device, or intelligently combined into a broader management/ monitoring ring through use of GENEREX's UNMS Centralized Monitoring software, the CS141 is flexible enough to solve any given niche requirement while still powerful and dependable enough to handle the day-to-day control of the most important critical infrastructural installations.

	CS141L Professional External (all UPS vendors)	CS141SC Professional Slot (all UPS vendors with SC slot for- mat)	CS141 Mini Slot (all UPS vendors with Mini slot format)
Power Consumption	12V (min. 9V, max. 30V DC), 150 mA	12V (min. 9V, max. 30V DC), 150 mA	12V (min. 9V, max. 30V DC), 150 mA
Size (B x L x H), weight	69 x 126 x 35mm, 210 g	60 x 120 x 29mm, 66 g	42 x 80 x 26mm, 36 g
Network / LAN	HW141: 10/ 100/ Mbit Base-T auto sense HW161: 1000 Mbit for (HW161)	HW141: 10/ 100/ Base-T auto sense HW161 1000 Mbit Base-T auto sense	HW141: 10/ 100/ Base-T auto sense HW161 1000 Mbit Base-T auto sense
RS-232 interface	2	2	2
RS-485 interface	Optional	Optional	-
RESET – Button	-	HW141: - / HW161: 1	HW141: - / HW161: 1
USB interface	1	-	-
AUX interface	1	1	1
MODBUS over IP	Standard	Standard	Standard
BACnet over IP	Standard	Standard	Standard
Remote syslog	Standard	Standard	Standard
Radius Server Support	Standard	Standard	Standard
Status LED's	normal green, boot/error red	normal green, boot/error red	normal green, boot/error red
SNMP V1 / V2	Standard	Standard	Standard
RCCMD	Standard	Standard	Standard
SMTP—Email	Standard	Standard	Standard
802.1x	Standard	Standard	Standard
Dry Contact Functionality	Optional	Optional	Optional
Profibus	Optional	Optional	Optional
LONbus	Optional	Optional	Optional
GSM Modem	Optional	Optional	Optional
User Manual	German, English	German, English	German, English
MIB File Available	RFC 1628 and private extentions	RFC 1628 and private extensions	RFC 1628 and private extensions
Operating Temperature.	0 – 45 °C	0 – 70 °C	0 – 70 °C
Storage Temperature	0 – 70 °C	0 – 70 °C	0 – 70 °C
Max. Operating Ambient Temperature	45 °C	55 °C	55 °C
CPU	ARM Cortex A8 800 MHz	Cortex A8 800 MHz	Cortex A8 800 MHz
Flash Memory	HW141: 512 MB / HW161: 8 GB	HW141: 512 MB / HW161: 8 GB	HW141: 512 MB / HW161: 8 GB
RAM	HW141: 128 MB DDR3 HW161: 512 MB DDR3	HW141: 128 MB DDR3 HW161: 512 MB DDR3	HW141: 128 MB DDR3 HW161: 512 MB DDR3
Humidity	20-95%, not condensing	20-95%, not condensing	20-95%, not condensing
Classified for	CE, UL/NEMKO	CE, UL/NEMKO	CE, UL/NEMKO
MTBF (EN/IEC 61709)	849.192 hours (96,9 years)	874080 hours (99,8 years)	874080 hours (99,8 years)
Product Warranty	2 Years	2 Years	2 Years

### **CS141 HW161 WEBMANAGER - Technical Data**



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