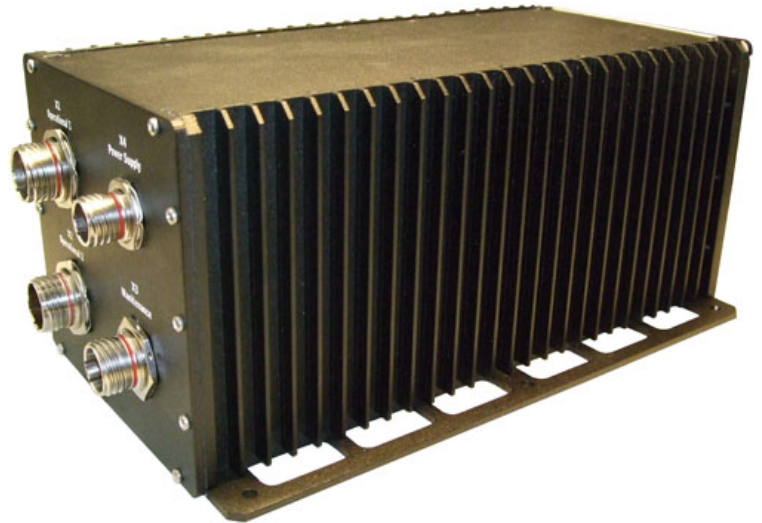


CPCI Rack – Single Euro with Conduction Cooling

- For standard 3U cards within CCA frames
- 3-slot 3U backplane
- System slot left, horizontal installation
- Outline 200 mm x 350 mm x 145 mm
- 4 MIL-C-38999 connectors (59 user I/O pins)
- PSU 18-32 V, 35 W
- -40 to +70(+85)°C operating temperature
- IP65 compliant
- For -40 to +85°C 3U CCA versions of MEN SBCs F11S, F12N, F14, F15, F17, F18, F19P, F21P, F22P, F75P and for F50C



This enclosure for CompactPCI® cards in 3U format allows to use standard boards that were designed for ventilated systems even in an environment which needs [conductive cooling](#). To do this, all critical components are directly coupled to the housing to divert waste heat to the exterior wall. This reduces the costs involved in the higher overhead of conduction cooling to the housing, and no PCB space is lost on the boards for this cooling method.

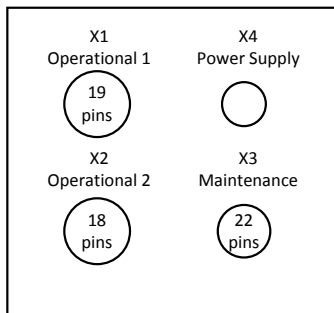
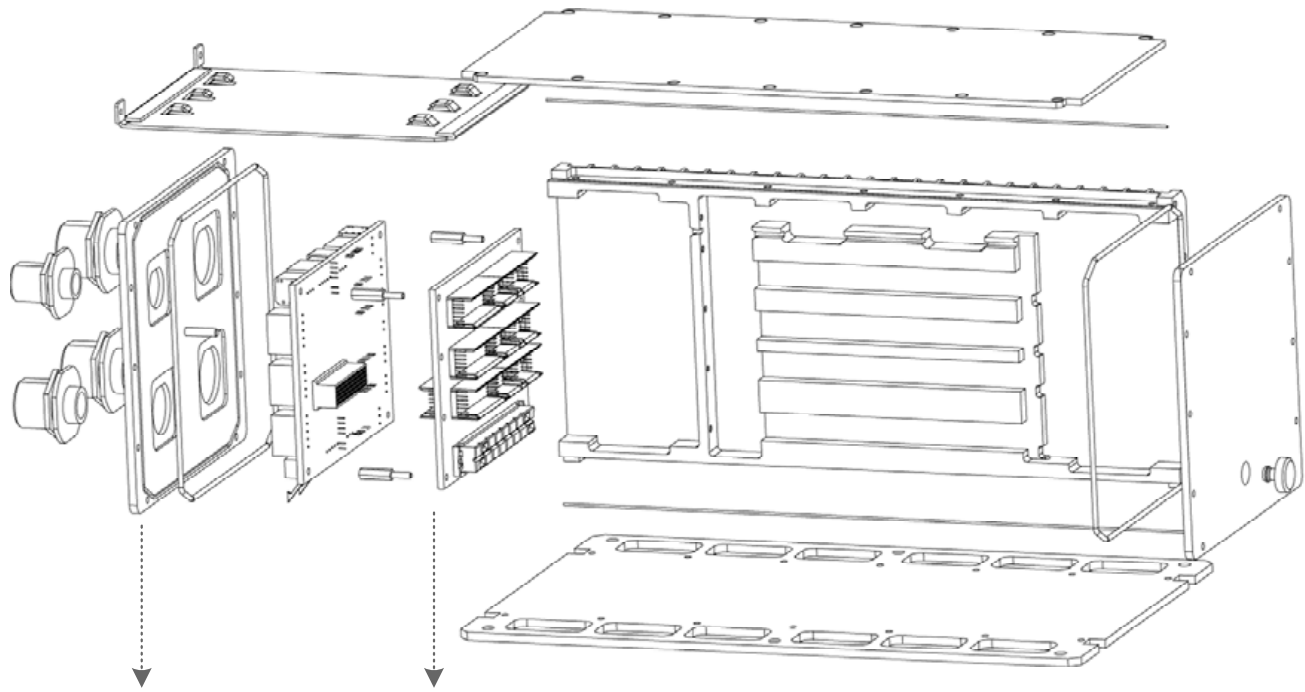
This extremely robust enclosure is hermetically sealed against impacts from outside, offers high vibration and shock resistance through the use of wedge locks as well as special connector types such as MIL-C-38999. The standard front connectors of the boards are wired to four MIL-C-38999 connectors (three I/O connectors

and one power supply connector) at the rear side of the system inside the housing. Both front and rear I/O can be made available on these connectors, and the pin-out is always customized.

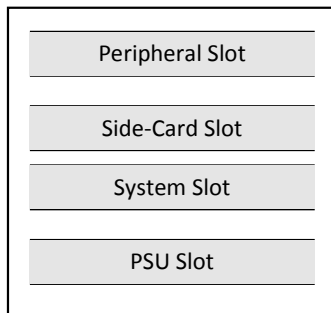
The standard CompactPCI® boards are fitted into a special "CCA" frame (conduction cooled assembly) and inserted into the system. The system provides three CompactPCI® slots for one CPU board with a side card and one I/O board, as well as a PSU slot with an H15 connector. The distance between the slots on the backplane is greater than on standard backplanes.

The thermal resistance is 0.4 Kelvin/Watt and the temperature class Tx for 40 W maximum performance (for boards with an operating temperature of -40 to +85°C). The enclosure is compliant with IP65 for protection against dust and humidity. The system is suited for MEN boards F11S, F12N, F13, F14, F15, F17, F18, F19P, F21P, F22P, F75P and F50C.

Diagram



Rear Panel



Backplane

Technical Data

General System Characteristics	<ul style="list-style-type: none">■ 3 slots for 3U Eurocard boards in CCA frame■ Middle slot (right of the system slot) designed for a side card connected to the CPU board■ Conduction-cooled
Mechanical Specifications	<ul style="list-style-type: none">■ 3U card horizontal■ Dimensions: 200 mm x 350 mm x 145 mm■ Weight: 4500g■ IP65 compliant
Connectors	<ul style="list-style-type: none">■ 4 MIL-C-38999 connectors X1..X4■ X1..X3 for customized I/O<ul style="list-style-type: none">□ 59 usable I/O pins■ X4 for power supply
CompactPCI® Backplane	<ul style="list-style-type: none">■ Compliance with CompactPCI® Spec. 2.0 Rev. 2.1 and IEC 61 076-4-101 (connectors)■ 3-slot<ul style="list-style-type: none">□ CPU system slot□ Side-card slot□ Peripheral slot■ System slot on the left
Power Supply	<ul style="list-style-type: none">■ PSU 3U CCA■ Input: 24VDC nominal (18-32V)■ Output 5V, 3.3V/35W■ Robust internal connection to rear-panel outer connector X4■ SMBus■ External I/Os for key function■ Overtemperature shutdown: 50..90°C (adjustable by SMBus command)■ Holdup time according to EN50155 Class S2
Environmental Specifications	<ul style="list-style-type: none">■ Temperature range (operation):<ul style="list-style-type: none">□ -40°C to +70°C, with up to +85°C for 10 minutes according to class Tx (EN50155)□ Thermal resistance 0.4 K/W■ Temperature range (storage): -40..+85°C■ Relative humidity (operation): max. 95% non-condensing■ Relative humidity (storage): max. 95% non-condensing■ Shock: according to EN 61373, Class B■ Vibration: according to EN 61373, Class B
Suited for MEN Boards ...	<ul style="list-style-type: none">■ F50C■ F11S (in a special CCA version)■ F12N (in a special CCA version)■ F14 (in a special CCA version)■ F15 (in a special CCA version)■ F17 (in a special CCA version)■ F18 (in a special CCA version)■ F19P (in a special CCA version)■ F21P (in a special CCA version)■ F22P (in a special CCA version)■ F75P (in a special CCA version)

Configuration & Options

Standard Configurations

Article No.	Slots	Size	PSU	Installation	Connectors
0701-0054	1 system slot, 1 side-card slot, 1 peripheral slot	200mm x 350mm x 145mm	9-36VDC, 35W	Horizontal	4 MIL-C-38999

Options

Slots	<ul style="list-style-type: none"> ■ Different number/type of slots (requires change of mechanical dimensions)
I/O	<ul style="list-style-type: none"> ■ Individual signal routing to outer connectors ■ Individual CCA frame
Connectors	<ul style="list-style-type: none"> ■ Different outer connectors (e.g. M12)
PSU	<ul style="list-style-type: none"> ■ Input voltage range 9..154V
Mechanical	<ul style="list-style-type: none"> ■ Wall-mounting

Please note that some of these options may only be available for large volumes. Please ask our sales staff for more information.

Ordering Information

<p>Standard CPCI Rack Models</p>	<p>MEN delivers turn-key systems completely installed (hardware, operating system, accessories), wired and tested. Different rack sizes, power supplies and backplanes on request. For details please contact your local sales representative.</p>
<p>0701-0054</p>	<p>CompactPCI® rack for 3U cards in CCA frames, 3 slots, incl. wide-range PSU 24VDC, -40..+70°C(+85°C) qualified (Tx), IP65</p>
<p>Miscellaneous Accessories</p>	<p>0500-0131 Spare part, four mating connectors for 0701-0054, according to MIL D38999, -40..+85°C</p>
<p>Software: Linux</p>	<p>This product is designed to work under Linux. See below for potentially available separate software packages from MEN.</p> <p>13AD78-06 MDIS5™ low-level driver sources (MEN) for PU2, PU3, PU4, PU5, PU6 and CCA Rack PSU controller on SMBus</p>
<p>Software: Windows®</p>	<p>This product is designed to work under Windows®. See below for potentially available separate software packages from MEN.</p> <p>13AD78-70 MDIS4™/2004 / MDIS5™ Windows® driver (MEN) for PU2, PU3, PU4, PU5, PU6 and CCA Rack PSU controller on SMBus</p>
<p>Software: VxWorks®</p>	<p>This product is designed to work under VxWorks®. For details regarding supported/unsupported board functions please refer to the corresponding software data sheets.</p> <p>13AD78-06 MDIS5™ low-level driver sources (MEN) for PU2, PU3, PU4, PU5, PU6 and CCA Rack PSU controller on SMBus</p>
<p>Software: QNX®</p>	<p>This product is designed to work under QNX®. For details regarding supported/unsupported board functions please refer to the corresponding software data sheets.</p> <p>13AD78-06 MDIS5™ low-level driver sources (MEN) for PU2, PU3, PU4, PU5, PU6 and CCA Rack PSU controller on SMBus</p>
<p>Software: OS-9®</p>	<p>This product is designed to work under OS-9®. For details regarding supported/unsupported board functions please refer to the corresponding software data sheets.</p> <p>13AD78-06 MDIS5™ low-level driver sources (MEN) for PU2, PU3, PU4, PU5, PU6 and CCA Rack PSU controller on SMBus</p>
<p>For operating systems not mentioned here contact MEN sales.</p>	
<p>Documentation</p>	<p>20SYST016 3U CompactPCI® CCA Rack User Manual</p>

Contact Information

Germany

MEN Mikro Elektronik GmbH
Neuwieder Straße 3-7
90411 Nuremberg
Phone +49-911-99 33 5-0
Fax +49-911-99 33 5-901

info@men.de
www.men.de

France

MEN Mikro Elektronik SA
18, rue René Cassin
ZA de la Châtelaine
74240 Gaillard
Phone +33 (0) 450-955-312
Fax +33 (0) 450-955-211

info@men-france.fr
www.men-france.fr

USA

MEN Micro Inc.
860 Penllyn Blue Bell Pike
Blue Bell, PA 19422
Phone (215) 542-9575
Fax (215) 542-9577

sales@menmicro.com
www.menmicro.com

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