



DATASHEET

Power distribution units (RACK PDUs)

POWER DISTRIBUTION UNITS (RACK PDUs)



- Our portfolio of rack **power distribution units (PDUs)** for IT environments with high power density comprises of 3 types—**managed PDUs**, allowing the user to control individual outlets or groups of outlets remotely via a data network, **monitored PDUs** enabling remote monitoring of current and energy consumption from the PDU and **basic PDUs** without additional features.

MAIN ADVANTAGES

- PDUs offer a combination of outlets, including national outlet styles combined with industrial outlets and 1- or 3-phase power input
- Hybrid technology of access—Ethernet and data bus connections
- High accuracy of metered values

Overview of power distribution units (PDUs)	BASIC		MONITORED ¹		MANAGED ²	
	DP-RP	IP-BA	IP-SEI	IP-SEI-POM ³	IP-SEA	IP-SEA-POM ⁴
Metered (V, A, f, PF, kVA, kW, kWh)	–	–	✓	✓	✓	✓
Input metering	–	–	✓	✓	✓	✓
Metering of individual outlets	–	–	✓	✓	–	✓
Switching of individual outlets	–	–	–	–	✓	✓
Primary-Secondary connection	–	–	✓	✓	✓	✓
SNMP	–	–	✓	✓	✓	✓
Modbus TCP	–	–	✓	✓	✓	✓

¹ MONITORED: Remote monitoring of power consumption (input metering).

² MANAGED: Remote monitoring of energy consumption (input metering) and switching of individual outlets.

³ MONITORED with POM designation: Remote monitoring of energy consumption—input metering and metering on each individual outlet (POM = per outlet monitored).

⁴ MANAGED with POM designation: Remote monitoring of energy consumption—input metering and metering on each individual outlet (POM = per outlet monitored) including the ability to control the outlets.

BASIC POWER DISTRIBUTION UNITS



- Used for supply of energy and its distribution to individual IT equipment in the racks
- Placement in the rack – versions for horizontal (for 19" and 10" extrusions) and vertical installation
- Output types: UTE, SCHUKO, UK, IEC320 C13, IEC320 C19 (other types possible on request)
- Max. load: for SCHUKO/UTE or IEC320 C19: 16 A, 250 V
for UK: 13 A, 250 V
for IEC320 C13: 10 A, 250 V
- Basic PDUs are supplied with a 3 m power cable and mounting brackets (to mount the PDU vertically, it is recommended to order a universal bracket, code DP-RP-VM-12)



DP-RP-09-UTE



DP-RP-12-IECC13



DP-RP-09-SCHU

DESCRIPTION

Material

- Unit: anodized aluminum with a protective layer against oxidation, PA6 plastic
- Mounting brackets: sheet steel

Dimensions

- Length: predefined by type, or can be adjusted for the configuration of choice
- Height: 44 mm
- Depth: 48 or 50 mm

Connection

- 1-phase 230 V AC or 3-phase 230/400 V AC, 16 A or 32 A

Package includes

- Power distribution unit with non-detachable 3 m power cable with plug
- Brackets for horizontal mounting

Basic Power Distribution Units—Uniform Outlet Type

Code	Mounting *	H (in U)	Input plug	Outlet type	Number of outlets	Overvoltage protection	Switch	Rated current (A)	Dimensions (mm)		
									H	W	D
DP-RP-02-UK	10"	1	UK	UK	2	–	–	13	44	208	48
DP-RP-03-UTE	10"	1	SCHUKO/UTE	UTE	3	–	–	16	44	208	48
DP-RP-03-SCHU	10"	1	SCHUKO/UTE	SCHUKO	3	–	–	16	44	208	48
DP-RP-06-UTESP	19"	2	SCHUKO/UTE	UTE	6	✓	✓	16	89	487	50
DP-RP-06-UTE ^{PH} 1	19"	1	SCHUKO/UTE	UTE	6	✓	–	16	44	437	48
DP-RP-06-SCHUSP	19"	2	SCHUKO/UTE	SCHUKO	6	✓	✓	16	89	487	50
DP-RP-06-SCHUPH 1	19"	1	SCHUKO/UTE	SCHUKO	6	✓	–	16	44	437	48
DP-RP-06-UKS	19"	1	UK	UK	6	–	✓	13	44	437	48
DP-RP-07-UK	19"	1	UK	UK	7	–	–	13	44	437	48
DP-RP-08-UTES	19"	1	SCHUKO/UTE	UTE	8	–	✓	16	44	437	48
DP-RP-08-SCHUS	19"	1	SCHUKO/UTE	SCHUKO	8	–	✓	16	44	437	48
DP-RP-08-SCHUF-IEEC14 2	19"	1	C14	SCHUKO	8	–	–	10	44	437	48
DP-RP-08-UTEF-IEEC14 2	19"	1	C14	UTE	8	–	–	10	44	437	48
DP-RP-09-UTE	19"	1	SCHUKO/UTE	UTE	9	–	–	16	44	437	48
DP-RP-09-SCHU	19"	1	SCHUKO/UTE	SCHUKO	9	–	–	16	44	437	48
DP-RP-09-IECC19	19"	1	SCHUKO/UTE	C19	9	–	–	16	44	437	48
DP-RP-12-IECC13	19"	1	SCHUKO/UTE	C13	12	–	–	16	44	437	48
IP-BA-C08C300016	19"	1	C20	C13	12	–	–	16	44	439	48
DP-RP-20-IECC19	Vertical	–	SCHUKO/UTE	C19	20	–	–	16	906	44	48
DP-RP-20-IECC13	Vertical	–	SCHUKO/UTE	C13	20	–	–	16	694	44	48
DP-RP-20-SCHUV	Vertical	–	SCHUKO/UTE	SCHUKO	20	–	–	16	906	44	48
DP-RP-20-UTEV	Vertical	–	SCHUKO/UTE	UTE	20	–	–	16	906	44	48

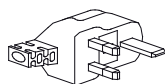
* 10"/19" = horizontal mounting onto 10"/19" extrusions.

¹ The unit includes a high-frequency filter.

² The unit is fitted with a 10 A fuse.



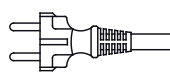
UK



UK (BS 1363)



SCHUKO



SCHUKO – GERMAN



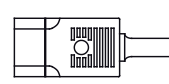
UTE



UTE – FRENCH



IEC320 C13



IEC320 C14



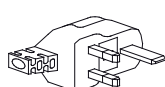
IEC320 C19

Basic Power Distribution Units—Multiple Outlet Types

Code	Mounting	H (in U)	Input plug	Outlet type 1	Number of type 1 outlets	Outlet type 2	Number of type 2 outlets	Rated current (A)	Dimensions (mm)		
									H	W	D
IP-BA-308UK8C916	Vertical	–	EN 60309	UK	8	C19	8	16	860	44	48
IP-BA-312UK8C316	Vertical	–	EN 60309	UK	12	C13	8	16	985	44	48
IP-BA-308SH8C916	Vertical	–	EN 60309	SCHUKO	8	C19	8	16	722	44	48
IP-BA-312SH8C316	Vertical	–	EN 60309	SCHUKO	12	C13	8	16	777	44	48
IP-BA-308UT8C916	Vertical	–	EN 60309	UTE	8	C19	8	16	780	44	48
IP-BA-312UT8C316	Vertical	–	EN 60309	UTE	12	C13	8	16	865	44	48
IP-BA-320C34C916	Vertical	–	EN 60309	C13	20	C19	4	16	908	44	48
IP-BA-C20C34C916	Vertical	–	C20	C13	20	C19	4	16	908	44	48
IP-BA-320C34C932	Vertical	–	EN 60309	C13	20	C19	4	32	1035	44	48
IP-BA-318C36C911	Vertical	–	EN 60309	C13	18	C19	6	3×16	996	44	48
IP-BA-324C36C922	Vertical	–	EN 60309	C13	24	C19	6	3×32	1673	44	48



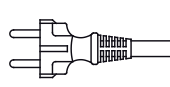
UK



UK (BS 1363)



SCHUKO



SCHUKO – GERMAN



UTE



UTE – FRENCH



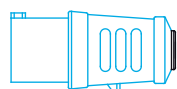
IEC320 C13



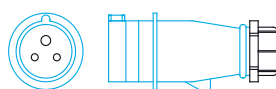
IEC320 C19



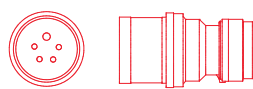
EN60309 16A 1PH



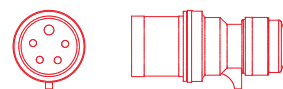
EN60309 32A 1PH



EN60309 16A 3PH



EN60309 32A 3PH



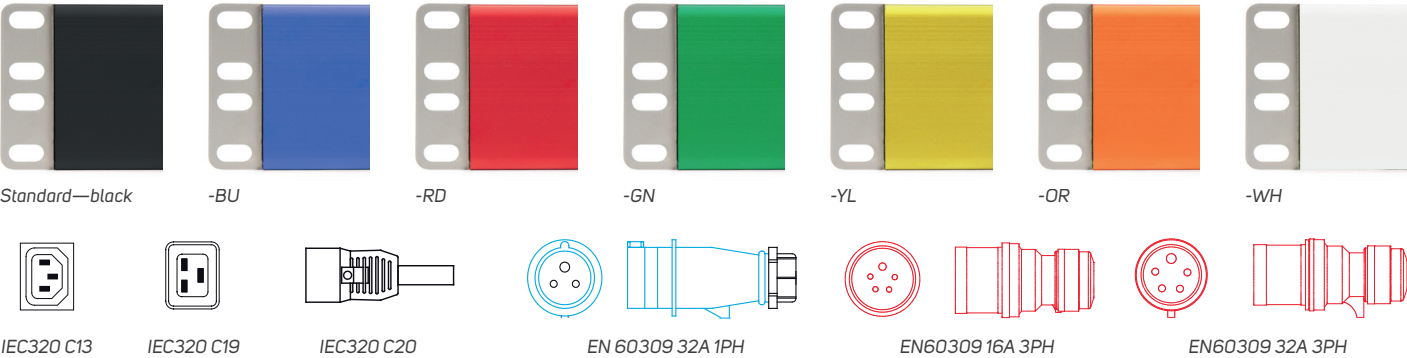
MONITORED POWER DISTRIBUTION UNITS



- Provide supply of energy, measure voltage and frequency, allow reporting of the load power factor, active and apparent power, and energy consumption (in kWh)
- Monitoring of energy consumption from individual outlets (PDU versions with POM designation)
- Illuminated display located on the device or separately next to the power distribution unit
- Built-in web server enables the remote setting and reading of information about the specific PDU from a user-friendly web interface.
- Allow to integrate the PDU into a CONTEG Pro Server monitoring system for central management or into a third party system (MIB table available)
- Hybrid access technology—Ethernet connectivity and serial communication; both interfaces can be accessed simultaneously and independently
- Compatible with 19" IT racks
- Placement in the rack—types for horizontal and vertical mounting

Code ¹	Mounting [*]	H (in U)	Input plug	Power cable length (m)	Outlet type 1	Number of type 1 outlets	Outlet type 2	Number of type 2 outlets	Rated current (A)	Dimensions (mm)		
										H	W	D
IP-SEI-008C300016	19"	1.5	C20	— ²	C13	8	—	—	1×16A	65	440	112
IP-SEI-008C3POM16	19"	1.5	C20	— ²	C13	8	—	—	1×16A	65	440	112
IP-SEI-018C36C916	Vertical	—	C20	— ²	C13	18	C19	6	1×16A	900	65	56
IP-SEI-018C36C9POM16	Vertical	—	C20	— ²	C13	18	C19	6	1×16A	900	65	56
IP-SEI-318C36C932	Vertical	—	EN 60309	3	C13	18	C19	6	1×32A	980	65	56
IP-SEI-318C36C9POM32	Vertical	—	EN 60309	3	C13	18	C19	6	1×32A	980	65	56
IP-SEI-336C36C932	Vertical	—	EN 60309	3	C13	36	C19	6	1×32A	1410	65	56
IP-SEI-336C36C9POM32	Vertical	—	EN 60309	3	C13	36	C19	6	1×32A	1410	65	56
IP-SEI-336C36C911	Vertical	—	EN 60309	3	C13	36	C19	6	3×16A	1385	65	56
IP-SEI-336C36C9POM11	Vertical	—	EN 60309	3	C13	36	C19	6	3×16A	1385	65	56
IP-SEI-336C36C922	Vertical	—	EN 60309	3	C13	36	C19	6	3×32A	1560	65	56
IP-SEI-336C36C9POM22	Vertical	—	EN 60309	3	C13	36	C19	6	3×32A	1560	65	56

* 19" = horizontal mounting onto 19" extrusions.
¹ The standard unit color is black. To order the unit in a different color, fill the suffix of the color of choice into the product's code. Suffixes: blue (-BU), red (-RD), green (-GN), yellow (-YL), orange (-OR), white (-WH).
² Power supply cables must be ordered separately.
Vertical PDUs are not equipped with brackets which need to be ordered separately.



DESCRIPTION

Material

- 1.5 mm anodized aluminum with a protective layer against oxidation with brackets made of stainless steel

Dimensions

- Length: predefined by type, or can be adjusted for the configuration of choice
- Height: 65 mm
- Depth: 52.6 mm

Color

- Black, red, blue, green, yellow, orange, white

Display

- Illuminated LCD

Connection

- 1-phase 230 V AC or 3-phase 230/400 V AC, 16 A or 32 A

Measurement

- RMS value of current
- Voltage (V) and frequency
- Load power factor
- Total energy consumption
- True (W) and apparent power (VA)
- Measurement error <1%

Data bus

- 2× RJ45 data bus RS-485 connectors

Ethernet

- RJ45 connector
- TCP/IP 10/100 Mb/s, DHCP with back-up static IP, SNMP, Modbus, API

Sensor port

- Option to connect temperature and humidity sensor

Operating temperature range

- 0–60 °C

Protection

Unrestricted choice of fuse type including:

- Miniature Circuit Breaker (MCB)
- Thermal fuse
- Glass cartridge fuse bracket
- PASCO cartridge bracket

Overvoltage protection

- Optionally as a Hot Swap module

Power consumption

- < 3 W

MANAGED POWER DISTRIBUTION UNITS



- Provide supply of energy and remote control over individual outlets (switching on/off), enable server restart
- Measure voltage and frequency, allow reporting of the load power factor, active and apparent power, and energy consumption (in kWh)
- Monitoring of energy consumption from individual outlets (PDU versions with POM designation)
- Illuminated display located on the device or separately next to the power distribution unit
- Built-in web server enables the remote setting of the unit, reading the information and management of the outlets of the specific PDU from a user-friendly web interface.
- Allow to integrate the PDU into a CONTEG Pro Server monitoring system for central management or into a third party system (MIB table available)
- Hybrid access technology—Ethernet connectivity and serial communication; both interfaces can be accessed simultaneously and independently
- Compatible with 19" IT racks
- Placement in the rack—types for horizontal and vertical mounting

Code ¹	Mounting *	H (in U)	Input plug	Power cable length (m)	Outlet type 1	Number of type 1 outlets	Outlet type 2	Number of type 2 outlets	Rated current (A)	Dimensions (mm)		
										H	W	D
IP-SEA-008C300016	19"	1.5	C20	— ²	C13	8	—	—	1×16A	65	440	112
IP-SEA-008C3POM16	19"	1.5	C20	— ²	C13	8	—	—	1×16A	65	440	112
IP-SEA-018C36C916	Vertical	—	C20	— ²	C13	18	C19	6	1×16A	1570	65	56
IP-SEA-018C36C9POM16	Vertical	—	C20	— ²	C13	18	C19	6	1×16A	1570	65	56
IP-SEA-318C36C932	Vertical	—	EN 60309	3	C13	18	C19	6	1×32A	1680	65	56
IP-SEA-318C36C9POM32	Vertical	—	EN 60309	3	C13	18	C19	6	1×32A	1680	65	56
IP-SEA-318C36C911	Vertical	—	EN 60309	3	C13	18	C19	6	3×16A	1610	65	56
IP-SEA-318C36C9POM11	Vertical	—	EN 60309	3	C13	18	C19	6	3×16A	1610	65	56
IP-SEA-318C36C922	Vertical	—	EN 60309	3	C13	18	C19	6	3×32A	1700	65	56
IP-SEA-318C36C9POM22	Vertical	—	EN 60309	3	C13	18	C19	6	3×32A	1700	65	56

* 19" = horizontal mounting onto 19" extrusions.

¹ The standard unit color is black. To order the unit in a different color, fill the suffix of the color of choice into the product's code. Suffixes: blue (-BU), red (-RD), green (-GN), yellow (-YL), orange (-OR), white (-WH).

² Power supply cables must be ordered separately.

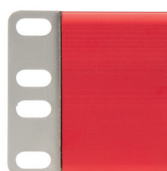
Vertical PDUs are not equipped with brackets which need to be ordered separately.



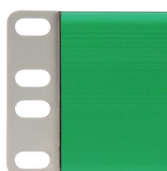
Standard—black



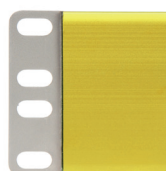
-BU



-RD



-GN



-YL



-OR



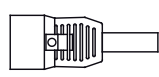
-WH



IEC320 C13



IEC320 C19



IEC320 C20



EN 60309 32A 1PH



EN60309 16A 3PH



EN60309 32A 3PH

DESCRIPTION

Material

- 1.5 mm anodized aluminum with a protective layer against oxidation with brackets made of stainless steel

Dimensions

- Length: predefined by type, or can be adjusted for the configuration of choice
- Height: 65 mm
- Depth: 52.6 mm

Color

- Black, red, blue, green, yellow, orange, white

Display

- Illuminated LCD

Connection

- 1-phase 230 V AC or 3-phase 230/400 V AC, 16 A or 32 A

Measurement

- RMS value of current
- Voltage (V) and frequency
- Load power factor
- Total energy consumption
- True (W) and apparent power (VA)
- Measurement error <1 %

Data bus

- 2× RJ45 data bus
- RS-485 connectors

Ethernet

- RJ45 connector
- TCP/IP 10/100 Mb/s, DHCP with back-up static IP, SNMP, Modbus, API

Sensor port

- Option to connect temperature and humidity sensor

Operating temperature range

- 0–60 °C

Protection

Unrestricted choice of fuse type including:

- Miniature Circuit Breaker (MCB)
- Thermal fuse
- Glass cartridge fuse bracket
- PASCO cartridge bracket

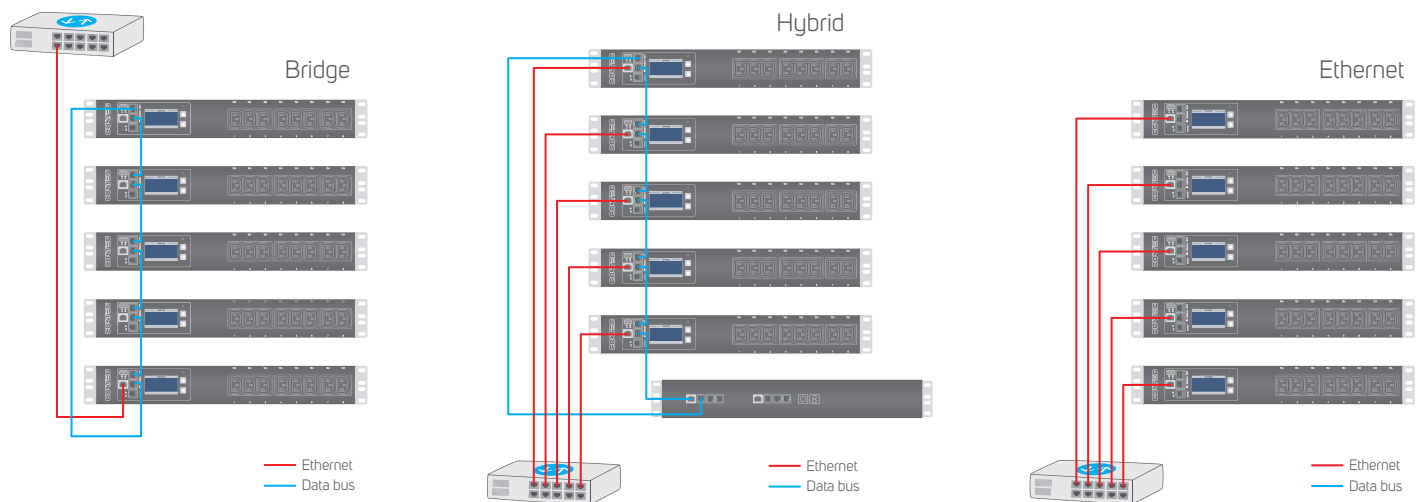
Overvoltage protection

- Optionally as a Hot Swap module

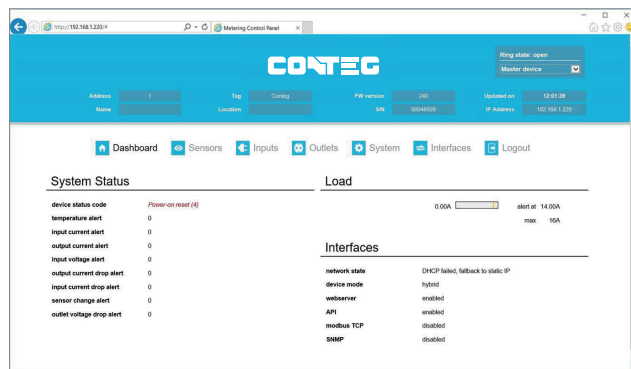
Power consumption

- < 3 W

Methods of Connection of Monitored and Managed PDUs



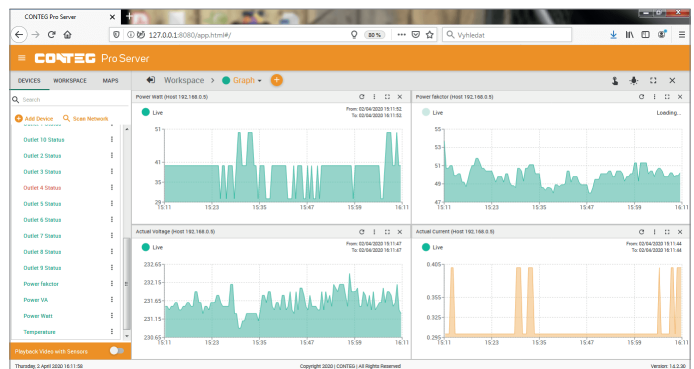
Remote Control of Monitored and Managed PDUs



User-Friendly Web Interface

Each monitored and managed PDU features a built-in web server which enables the remote setting of PDU parameters and reading of information through a web application. In the case of managed PDUs, the web interface can be used even to control individual outlets of the given PDU.

[Take a look at the web application >>](#)



Integration of PDUs into a Monitoring System

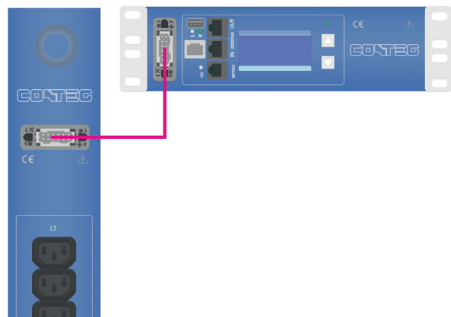
Monitored and managed PDUs can allow connecting to CONTEG Pro Server central monitoring system via SNMP (v1, v2, and v3), Modbus and API, or another 3rd party system.

[Take a look at CONTEG Pro Server >>](#)



ACCESSORIES

PDU variant with an external display



The external illuminated display is designed for monitored and managed PDUs that consist of two functional parts. The display is located on a separate communication module and is connected to the PDU by a 1.5 m cable. The PDU with an external display is suitable for critical IT devices that require an uninterrupted power supply. Its main benefit lies in the fact that it can be replaced at any time while the device is running. The display is fitted with brackets for horizontal mounting onto 19" extrusions, where it needs up 1.5 U of space in height. If a rack is fitted with two PDUs, the communication modules with the display can be mounted next to each other at the same height onto 19" extrusions. The external display does not constitute a functional unit on its own. For more information, contact our technical department at presales@conteg.com.

Suitable for

- Monitored and managed PDUs

Module material

- 1.5 mm anodized aluminum with a protective layer against oxidation with brackets made of stainless steel

Dimensions

- Length: 209 mm
- Height: 65 mm
- Depth: 52.6 mm

Color

- Black, red, blue, green, yellow, orange, white

Display

- Illuminated LCD

Inline Meter



The 1-phase or 3-phase inline power meter with an illuminated display is designed for measuring parameters on the lead-in cable to basic PDUs and is easy to connect into existing circuits. A built-in web server allows remote monitoring of power in real-time, as well as current consumption (A), voltage (V), energy consumption (kWh), and load power factor. The device also allows the connection of a temperature and humidity sensor (IP-S-PDU-SENSOR).

Suitable for

- Basic PDUs

Module material

- 1.5 mm anodized aluminum with a protective layer against oxidation, brackets made of stainless steel

Dimensions

- Length: 280 mm
- Height: 65 mm
- Depth: 52.5 mm

Mounting

- Vertical

Color

- Black, red

Display

- Illuminated LCD

Connection

- 1-phase 230 V AC or 3-phase 230/400 V AC, 16 A or 32 A

Data bus

- 2× RJ45 data bus RS-485 connectors

Ethernet

- RJ45 connector

Sensor port

- RJ11, option to connect temperature and humidity sensor

Package includes

- 3 m non-detachable input cable with EN60309 plug, 0.5 m non-detachable output cable with EN60309 outlet
- Brackets for vertical mounting

Code	Description	Color
IP-SEI-3-INLINE16	Inline meter 3.6 kW, 1-phase 16 A	Black
IP-SEI-3-INLINE16-RD	Inline meter 3.6 kW, 1-phase 16 A	Red
IP-SEI-3-INLINE32	Inline meter 7.2 kW, 1-phase 32 A	Black
IP-SEI-3-INLINE32-RD	Inline meter 7.2 kW, 1-phase 32 A	Red
IP-SEI-3-INLINE11	Inline meter 11 kW, 3-phase 16 A	Black
IP-SEI-3-INLINE11-RD	Inline meter 11 kW, 3-phase 16 A	Red
IP-SEI-3-INLINE22	Inline meter 22 kW, 3-phase 32 A	Black
IP-SEI-3-INLINE22-RD	Inline meter 22 kW, 3-phase 32 A	Red

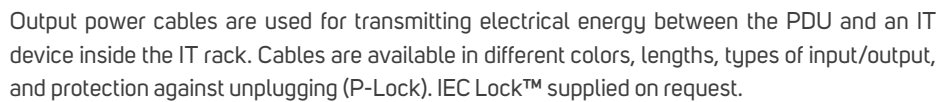
Suitable for

- Monitored and managed PDUs

Color

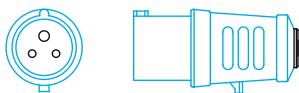
- Black

Output Power Cables



³ To order a color, fill the suffix of your chosen color into the product code—blue (-BU), red (-RD). The product is subject to minimum order quantity. Check the compatibility of your PDUs with these types of cables. The IP-SEI and IP-SEA series of PDUs feature compatible C19 outlets; compatible C13 outlets only appear on PDUs with dual outlets.

Input Power Cables



EN60309 16A 1PH

1-phase 16 A monitored and managed PDUs are supplied without a lead-in cable. It must be ordered separately. Cables are available in black color, with a length of 2.5 m and with various types of plugs.

Suitable for

- 1-phase 16 A monitored and managed PDUs from the IP-SEI/SEA series

Color

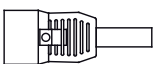
- Black

Cable length

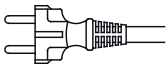
- 2.5 m

Code *	Output – input connector	Length
IP-C-C9SH25	IEC 320 C19 – SCHUKO	2.5 m
IP-C-C93025	IEC 320 C19 – EN 60309 (1x16 A)	2.5 m
IP-C-C9C225	IEC 320 C19 – IEC 320 C20	2.5 m

* You can also choose from C19 – C20 power cables shown on the previous page (code e.g. IP-C-PC9C220, IP-C-PC9C225, IP-C-PC9C230), including their color variants.



IEC320 C20



SCHUKO – GERMAN

Locking Inserts



Retention sleeves reduce the risk of accidental unplugging of the power cable. Our assortment includes sleeves for C13, C19 outlets, and C20 inlets as well as locking clips for C13 outlets, which are suitable for some types of basic PDUs.

Code	Description	Package
IP-C-FC13	Plug Lock sleeve insert for outlet C13	50 pcs
IP-C-FC19	Plug Lock sleeve insert for outlet C19	50 pcs
IP-C-PL20	Plug Lock sleeve insert for C20 inlet	50 pcs
DP-RP-LC-C3	Locking clip for C13 outlet—for DP-RP-12-IECC13 and DP-RP-20-IECC13	12 pcs

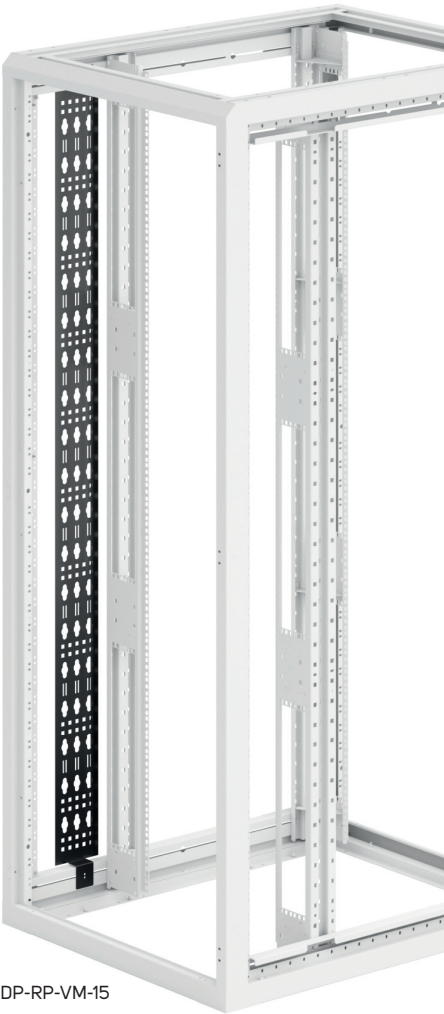
Output Adapter



The adapter is suitable for connecting devices that require a SCHUKO outlet to a PDU with IEC 320 C13 outlets.

Code	Description
IP-C –C4SH00	Power adapter IEC 320 C14 plug – SCHUKO outlet

Brackets for vertical installation of PDU

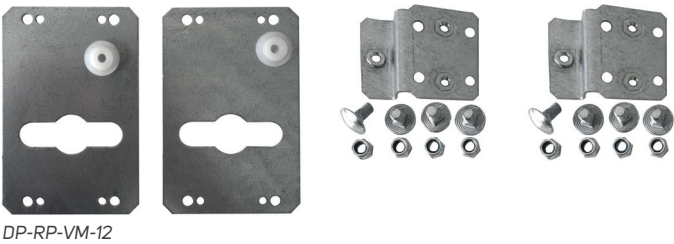


For vertical installation of a vertical power distribution panel into IT rack, it is necessary to order the appropriate bracket for basic, monitored and managed PDUs, which is not included in the package.

Universal bracket DP-RP-VM-12 can be used for installation of all types of PDUs into a rack with L, P and A-type of extrusions.

The black DP-RP-VM-15/xx bracket is designed for vertical mounting of up to 2 basic, monitored, or managed PDUs side by side into a rack with A-type 19" extrusions. To install the basic PDU, it is necessary to order the DP-RP-VM-BA adapter. In addition, the perforation on the bracket can be used for managing the cabling. It is possible to set the position of the bracket to minimize the used space. Easy installation is done with only 2 screws.

Code	Description
DP-RP-VM-01	Bracket for 19"/1U basic PDU (DP-RP) into the rack frame of the PREMIUM/OPTIMAL series
DP-RP-VM-02	Bracket for basic PDU (DP-RP-20 a IP-BA) into the rack frame of the PREMIUM/OPTIMAL series
DP-RP-VM-12	Universal bracket for PDU (IP-BA or IP-S) into a rack with L, P and A-type of extrusions
DP-RP-VM-15/42	Bracket for up to 2 PDUs side by side (IP-S, IP-BA with adaptor DP-RP-VM-BA, not included in the package) into a 42U rack with A-type extrusions, RAL 9005
DP-RP-VM-15/45	Bracket for up to 2 PDUs side by side (IP-S, IP-BA with adaptor DP-RP-VM-BA, not included in the package) into a 45U rack with A-type extrusions, RAL 9005
DP-RP-VM-15/48	Bracket for up to 2 PDUs side by side (IP-S, IP-BA with adaptor DP-RP-VM-BA, not included in the package) into a 48U rack with A-type extrusions, RAL 9005
DP-RP-VM-15/52	Bracket for up to 2 PDUs side by side (IP-S, IP-BA with adaptor DP-RP-VM-BA, not included in the package) into a 52U rack with A-type extrusions, RAL 9005
DP-RP-VM-BA	Adaptor with a button for PDU IP-BA at DP-RP-VM-15/xx bracket, set for one PDU





CONTEG, spol. s r.o.

Na Vitezne plani 1719/4

140 00 Prague 4

Czech Republic

Tel.: +420 565 300 358

conteg@conteg.com

www.conteg.com

CONTEG