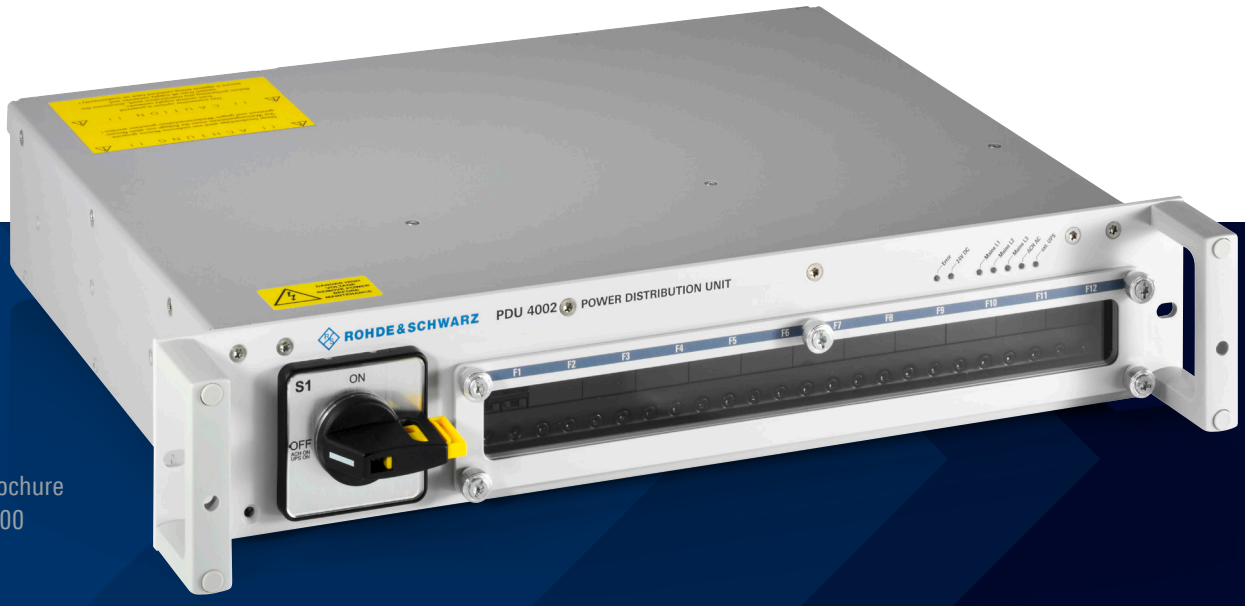
R&S®PDU4002
POWER DISTRIBUTION UNIT



Product Brochure
Version 01.00

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AT A GLANCE

The R&S®PDU4002 is a 19" power distribution unit, which provides the AC and DC mains power supply to all devices mounted in the 19" rack. Owing to the phase allocation variability, there are several R&S®PDU4002 models.

General description

The implemented rack devices are protected by circuit breakers on all poles. The assigned circuit breakers of the R&S®PDU4002 can be used either for AC or DC power. For this purpose, there are 12 double-pole slots. 10 of these slots can be configured freely.

It is essential to choose the values of the circuit breakers according to the requirements of your application. The following options are available:

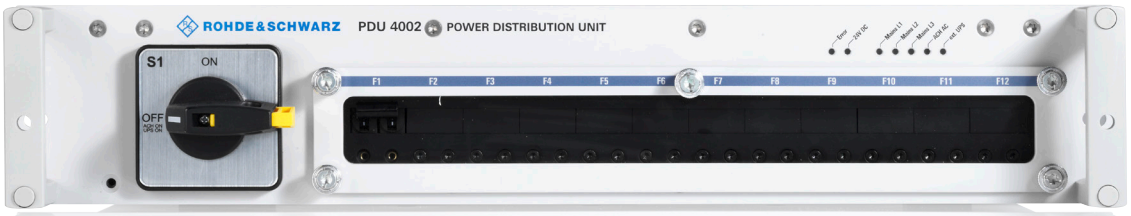
Slot	Circuit breaker options
Variable slots	
F2, F3, F6 to F8	max. 10 A, 110 V to 240 V AC, 50 Hz to 60 Hz
F4, F5, F9	max. 16 A, 110 V to 240 V AC, 50 Hz to 60 Hz
F11, F12	max. 25 A, 24 V to 28 V DC
Predefined slots	
F1 (ACH)	max. 6 A, 110 V to 240 V AC, 50 Hz to 60 Hz
F10 (UPS)	max. 16 A, 110 V to 240 V AC, 50 Hz to 60 Hz

Input X9 and output X19 are reserved for the uninterruptible power supply (UPS). The UPS is a separate electric circuit which cannot be disconnected via switch S1.

One of the units integrated in the R&S®PDU4002 is the power fail detection unit (PFDU). The PFDU manages device functions such as tracing the input power level or monitoring the status of the circuit breakers. This data is accessible via Ethernet port X50 on the rear panel.

Model overview

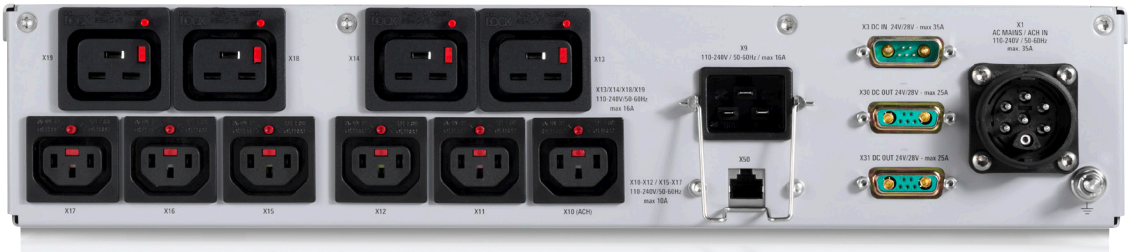
Owing to the phase allocation variability, several R&S®PDU4002 models are provided, as shown in the ordering information. Model .02 is regarded as the basic version. Corresponding phase allocation and bridge holding yield models .03 and .04. Model .12 is identical to model .02, except that the internal PFDU is primarily supplied by the mains instead of the anti-condensation heater (ACH) supply.



R&S®PDU4002 front panel

Rear panel interfaces

Description	Labeling	Voltage	Current	Connector type
AC mains and ACH input	X1	110 V/240 V AC	max. 35 A	6-pin plus PE pin
DC input	X3	+19 V/+32 V DC	max. 35 A	D-Sub 7W3P
UPS input	X19	110 V/240 V AC	max. 16 A	IEC 60320 C20
AC outputs	X10 to X12, X15 to X17	110 V/240 V AC	max. 10 A	IEC 60320 C13
AC outputs	X13, X14, X18, X19	110 V/240 V AC	max. 16 A	IEC 60320 C19
DC outputs	X30, X31	+19 V/+32 V DC	max. 25 A	D-Sub 7W3S
Ethernet interface	X50			8-pin RJ-45



R&S®PDU4002 rear panel

SPECIFICATIONS IN BRIEF

Specifications in brief		
Environmental data		
Climatic environmental simulation		
Temperature		in line with EN 60068-2-1/2
	operating temperature range	–20 °C to +55 °C
	storage temperature range	–40 °C to +70 °C
Damp heat		+30 °C to +55 °C ≤ 95 % rel. humidity, in line with EN 60068-2-30
Mechanical environmental tests		
Vibration	sinusoidal	1.5 mm to 0.15 mm double amplitude, 4.50 Hz, test period: 40 min on each of 3 axes, in line with MIL-STD-167-1, type 1
	random	shipboard random vibration exposure, 4 Hz to 100 Hz at 0.03 g^2/Hz, test period: 40 min on each of 3 axes, in line with MIL-STD-810F, method 514.5
Shock resistance		45 Hz crossover frequency, 40 g, 15 ms to 23 ms, 2 × 3 shocks per main axis (pos./neg.), in line with: ► MIL-STD-810F, method 516.5, procedure I ► EN 60068-2-27
EMC		in line with: ► EN 55022:2010 ► ETSI EN 301489-1 V2.1.1 (2017-02) R&TTE Article 3(1) (b) ► ETSI EN 301489-22 V1.3.1 (2003-11) R&TTE Article 3(1) (b) ► EN 61000-3-2:2006 + A1:2009 + A2:2009 ► EN 61000-3-3:2008
Electrical safety		EN 60950-1, EN 50514, EN 62368-1
Protection class		► IP32 (front panel only) ► IP20 (rest of device) in line with IEC 60529
Mechanical data		
Dimensions	W × D × H, depth: distance between front panel and rear panel	482 mm × 356 mm × 88 mm (2 HU), 19 in × 14 in × 3.5 in
Weight		6.3 kg (13.9 lb)

ORDERING INFORMATION

Designation	Type	Order No.
Power distribution unit, 2 HU, power feed L1/L2 or L1/N	R&S®PDU4002	6179.0899.02
Power distribution unit, 2 HU, power feed L1/L2/L3	R&S®PDU4002	6179.0899.03
Power distribution unit, 2 HU, power feed L1/L2/L3/N	R&S®PDU4002	6179.0899.04
Power distribution unit, 2 HU, power feed L1/L2 or L1/N, power fail detection unit (PFDU) primarily supplied by mains	R&S®PDU4002	6179.0899.12

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- Energy efficiency and low emissions
- Longevity and optimized total cost of ownership

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ISO 9001

Certified Environmental Management
ISO 14001

Certified Quality Management
AQAP-2110

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R&S®PDU4002 Power Distribution Unit
Data without tolerance limits is not binding | Subject to change

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