



iFlex rack PDU – The power distribution for your data centre application

Custom. Efficient. Agile.

The iFlex rack PDUs are the flexible power distribution solutions in a rack for all data centre applications from SCHÄFER IT-Systems. In several variants – from the basic to the full-managed PDU – you always receive a solution specially tailored to your requirements.

In addition to customisability, our iFlex rack PDUs also impress with fast availability, as well as promoting your sustainability goals through regional manufacturing processes and other product features.

So the best thing you can do is convince yourself of the advantages of the custom, efficient and agile power distribution system – and get in touch with us.



www.schaefer-it-systems.com

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Model variants

Technical data	Managed	Switched	Output Metered	Input Metered	Basic
Design features					
Housing	Robust, 1.5-mm-thick aluminium profile				
Width	65 mm				
Depth	52.5 mm				
Colour options	Black; green; orange; blue; red; yellow (other colours on request)				
Customisability	Laser engravings according to customer requirements, custom number of outlets (with and without locking)				
Intelligent power management					
Simple and intuitive web interface	●	●	●	●	–
Energy-efficient due to low internal consumption	< 3 W	< 3 W	< 3 W	< 3 W	≈ 0 W
Number of manageable PDUs with one IP address (ring BUS)	Up to 50 PDUs				
Switching off superfluous power consumers	●	●	–	–	–
Free service tool	Maintenance, mass configuration and update, reading and writing data				
Integration into network management	Open standards support inclusion in existing DCIM solutions of numerous well-known manufacturers				
Input options/functions					
Input connectors	CEE 7/4 (Schuko); IEC 320 C14/C20; IEC 60309 1ph/N/PE 6h; IEC 60309 3ph/N/PE 6h; wire end ferrules (other input connectors on request)				
Cable length	Standard: 3 m (other cable lengths on request)				
Flexible cable entry	Top; bottom; rear; front				
Rated currents	16 A; 32 A				
Measurement per phase	●	●	●	●	–
Measurement per group/fuse	○	○	○	○	–
Output functions					
Output types	CEE 7/3 (Schuko); IEC 320 C13/C19; IEC 60309 1ph/N/PE 6h; IEC 60309 3ph/N/PE 6h; (other output types on request)				
Measurement per output	●	–	●	–	–
Switching per output	Bistable relays, fast switching function, switch-on delay				
Pull-out protection for IEC 60320	○ IEC LOCK®; ○ ports compatible with SecureLock® cables				
Display and network management					
Local display	LCD backlight Custom alignment, 0/90/180/270 degrees Signalling of warnings/alarms (e.g. when threshold values are exceeded) Network and system activity status display				
Ethernet	10/100 Mbit/s				
Network protocols	IPv4, IPv6, DHCP, DNS, HTTP, HTTPS, SSL, SNMPv1, SNMPv2, SNMPv3, SNMP trap, Modbus TCP, IPAPI				
Encryption/security	RSA, elliptic curve cryptography (ECC), private keys				
IP address allocation	DHCP with fall-back				

Technical data	Managed	Switched	Output Metered	Input Metered	Basic
Measurement functions					
Energy	Total energy consumption (in kWh)				
	Partial consumption (in kWh)				
	Apparent power (in VA)				
	Active power (in W)				
Current	Power factor (in %)				
	True-RMS (in A) with current peak registration				
	With low point registration in V				
Voltage	Apparent power in VA, active power in W				
Power	in %				
Power factor	±1% (V, A) (EN 50470-3 class B; EN 62053-21 class 1)				
Accuracy	RCM class B				
Optional residual current measurement	Measurement of temperature (°C) and rel. air humidity (%)				
Optional humidity/temperature sensor	Cable length 2.5 m				
	• Measuring range: 0–100% RH				
	• Accuracy: ±2% typical ±3% max. (20–80% RH)				
Digital input	• Measuring range: -40 °C–125 °C				
	• Accuracy: ±0.3 °C				
Digital input	2 x for connection of e.g.: Water leakage sensors, door contacts, potential-free outputs of other devices				
Fuse options					
Overload protection	Circuit breaker (thermal-magnetic; hydr.-magnetic)				
	Thermal fuse				
	Fuse (glass fuse; D-Fuse/DIAZED)				
Surge protection	Replaceable during ongoing operation; optional				
Environmental conditions					
Temperature range	0–60 °C				
Maximum height	2000 m				
Protection class	IP20				
Standards	CE compliance:				
	2014/35/EU Low Voltage Directive				
	2014/30/EU Electromagnetic Compliance Directive				
Standards	2011/65/EU RoHS Directive				
	LVD: EN 62368-1:2014				
Standards	EMC: EN/IEC 55032:2015; EN/IEC 55035:2017				

Benefits

Energy-efficient use of consumers and compliance with legal specifications under the new German Energy Efficiency Act

Compliance with legal regulations for fire safety reasons in sensitive areas such as public facilities

Immediate availability via the network due to short boot-up time (< 5 s)

High availability, including in projects

Customisation of a PDU, depending on customer requirements

Extending the service life of the PDU

Maximum availability and safety with unbalanced loads (less heat development)

No interruption of the power supply during tests according to DGUV (German Social Accident Insurance) V3

Cost and time savings in the installation and maintenance of the PDU

Maximum availability during switching operations – in particular, blade servers generate high inrush current peaks

Maximum safety in the event of a power failure

Cost saving due to small number of network ports

Compliance with network security specifications

High availability and maximum flexibility when it comes to network connection

PDU for use in high-density environments

Cost and time savings thanks to complete system (rack, PDU, monitoring and cooling)

Time saving on site due to quick installation in the rack

Cost saving due to low internal energy consumption

Fulfilment of specification in other countries as well

Maximum availability due to various pull-out protection functions of the IEC 60320 outputs

Extremely accurate power monitoring and cost accounting for current consumption

Compliance with optimal operating conditions by monitoring environmental conditions

Features

Extensive measurements of the electrical values and environmental conditions

Completely halogen-free (including the input cable)

Real-time operating system

Short delivery time due to regional production

Flexible design, maximum modification capability

Compatibility in further development

Larger cable cross-section for 32 A version (6 mm²)

RCM module type B with self-test

Mass firmware update and configuration tool

Powerless switching of the outputs through "near-zero voltage switching" and use of bistable relays

The bistable relays allow you to choose how the system behaves once the supply voltage returns after a power failure (e.g. keeping the previous switching state, delayed connection or switching off outputs in general)

Control of up to 50 PDUs via one IP address and one network port

HTTPs (with certificates), SNMP v3, access control (IP filter)

Different connection modes for remote control: Ethernet, bridge, hybrid, colocation

Maximum operating temperature of 60 °C

PDU pre-installed in the rack as a complete solution

Tool-free installation in the rack

Power loss < 3 W

Country-specific outputs for all models (Schuko, Switzerland, UK, France)

IEC LOCK®, SecureLock®

Measuring accuracy ±1% (V, A) according to EN 50470-3 class B and EN 62053-21 class 1

Environmental sensors (temperature, air humidity and potential-free input contacts)