



Excel PDU Product Guide

Excel presents the world's most innovative and advanced PDU

Excel is a world-class premium performing end-to-end infrastructure solution
- designed, manufactured, supported and delivered - without compromise.

www.excel-networking.com

excel
without compromise.

First in class industry innovation

Excel Networking is a leading provider of high-quality, customized rack power distribution units (PDUs), and related power solutions to meet the unique needs of demanding Data Centre environments and Computer Rooms worldwide. The new IEX PDU has been designed according to the latest global standards and using the latest technology to provide you with the industry's highest availability and smartest power monitoring distribution.

Full capacity all the time

The new IEX socket is a combination of IEC 320 C13 and IEC 320 C19 sockets that allows you the full usage of the PDU, all of the time. If you change or upgrade the rack equipment and it means different input plugs, no problem. The IEX socket accepts the IEC 320 C14 and IEC 320 C20 plugs from your servers or UPS to any outlet socket on the PDU.

Features

- IEX (C13/C19) all in one combo socket makes the PDU the most versatile, coping with any combination of C14 and C20 plugs.
- PDU cascading allows full control of up to 16 PDUs from one Primary/Master PDU, simplifying the number of IP addresses required.
- Multi-colour OLED illuminated screen display offering high contrast power usage and alarms.
- Built with high-temperature grade components to allow safe and reliable operation in hot 60°C (140°F) environments.
- Alternate branch wiring on 3phase systems helps power load balance.
- Full outlet control for remote On/Off or a timed reboot individual outlets or group of outlets to improve the operation uptime.
- Dual 1GB ethernet port for third party access to the PDU.
- IEX lock standard power cord retention and P-Lock and V-Lock power cord compatibility.

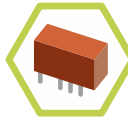


Excel Intelligent PDUs



Energy Efficient Latching Relays

Uses energy efficient bi-stable latching relays. These relays consume up to 70% less energy than alternatives, making outlet switching safer and configured in such a way that the outlet power distribution is always maintained.



OLED display

Shows Input power parameters and scroll individual outlet (V,A,PF,W,KWxH). Screen turns its orientation according PDU position.



Accurate Environment Monitoring cascading sensors EMD

The sensors benefit from the latest, most high-tech metering components, delivering the highest metering accuracy for temperature and relative humidity. Each sensor is built with 2 additional digital input contacts for (water leak, door contact, motion, vibration, smoke and any other sensor with normally open or closed). Sensors can be deployed in cascade up to 8 EMD sensors using network cables.



PDU Cascading Option

In order to save on network ports and manage multiple devices from one IP address we offer the opportunity to daisy chain up to 16 PDUs using Cat5/6 cable.



kWh Metering Accuracy

Enabling precise allocation of data centre expenses with +/- 1% billing grade accuracy.



High Outlet flexibility and alternating phase

IEX socket is a UL and IEC tested combination of C13 and C19 outlet that accommodates either a C14 and or C20 plug. Alternating phase set up helps on power balance for three phase systems.



RCM Residual Current Monitoring Option

By measuring current flowing in the ground wire, our residual current monitoring by BENDER™ reduces the risk of electric shock. PDUs equipped with residual current monitoring dramatically reduce the burden of regulatory auditing.



P-Lock & V-Lock Compatible outlets

Secure Locking Outlets

EXCEL intelligent rack PDUs are equipped with lockable outlets preventing power cords accidentally coming unplugged due to human error or vibration.

DCIM Compatible

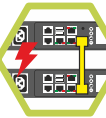
Interoperability with third party software

If you need to centrally manage all PDUs in your data centre we offer all communication protocols. Our solutions offer the option to communicate the status of rack-level power and environmental information to any third party Datacentre Infrastructure Management (DCIM) solution



Field-Replaceable Controller

The hot-swappable onboard controller, ensures that servers will never experience downtime when maintenance in the Data Centre is required and ensuring the infrastructure will never be obsolete being update ready.



Power Share Fail Over

Maintain the PDU sending alarms and network connectivity in case one of the PDUs in same rack loose power feed



Redundant Network Connections

World's first double Gigabit ethernet port PDU ensures monitoring reliability and allowing to be shared with Data centre management and end clients in one or two separate Networks



Security

EXCEL PDUs support the most stringent security protocols in the market in order to prevent unauthorized access (256 bit AES encryption, Radius, SNMPv3, user permissions, SSHv2, SSL, HTTPS).



Hydraulic-magnetic Circuit Breakers monitoring

Built with highly reliable hydraulic-magnetic circuit breakers which are not affected by ambient temperature and support delay curves appropriate for IT-equipment. The PDU proactively monitoring the status of the breakers in order to prevent downtime due to server power supply failure or overloads, sending an alert for any high load that risk a tripped circuit.



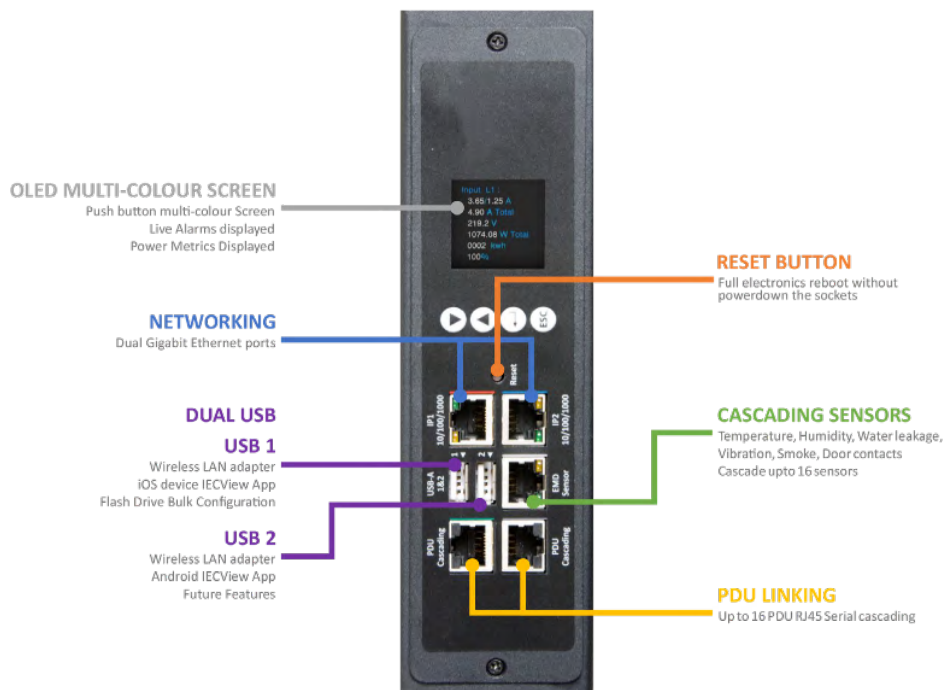
Full Color Range

Coloured PDUs make it easier to reduce human errors, identify power feeds, lowering the risk of unplanned downtime, EXCEL PDUs are available in any RAL-colour.



Leading in innovation

IEX PDU is manufactured with the the most advanced hot-swap, field replaceable SNMP IP controller. It is built with dual Gigabit Ethernet ports, an OLED full colour screen, cascading multi-sensor ports, enhanced security, sophisticated alarming and power monitoring across the whole power chain.



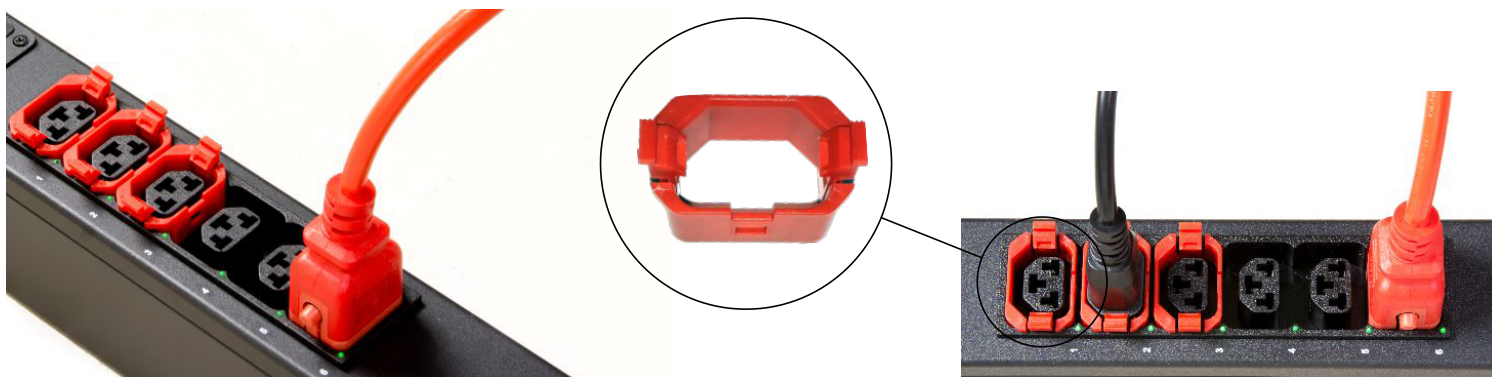
Never get caught out by changing outlet requirements for equipment changes

The new IEX socket is a combination of the C13 and C19 outlet standards that gives the maximum flexibility with the ability to hold both C14 and C20 plugs.

Fully patented and backed by IEC/EN and UL safety certifications it brings reliability in design.

IEX removable locker for C14 plugs and lockable power cords for C20 plugs

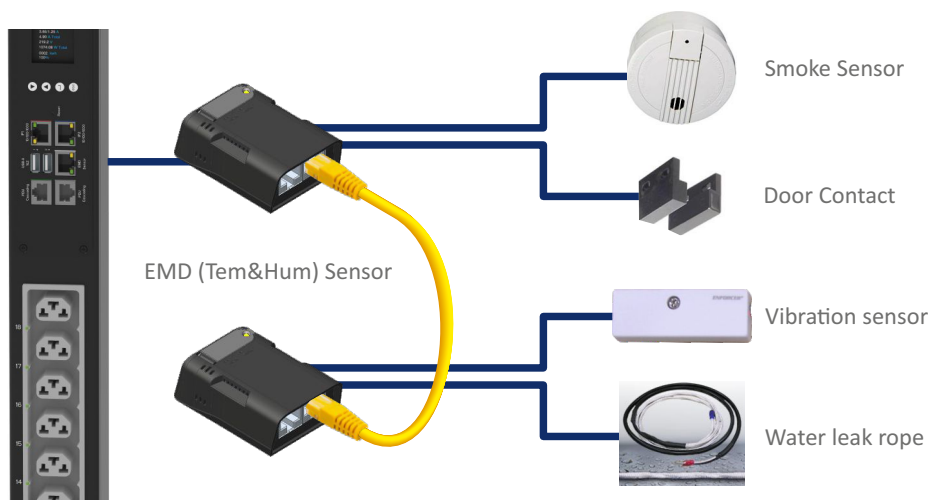
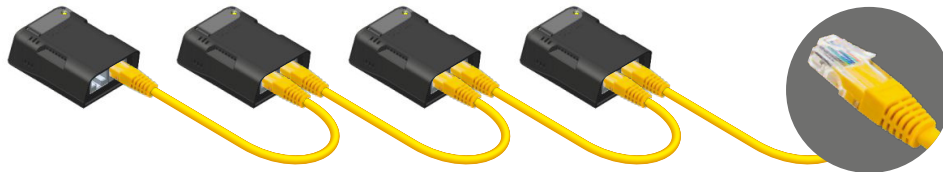
The IEX Lock-VP is a removable component that makes standard C14 plugs lock securely. The C20 Socket design has built in locking compatibly as standard with P-LOCK and V-LOCK plugs.



Flexible Environmental Monitoring With Smart Sensors EMD31

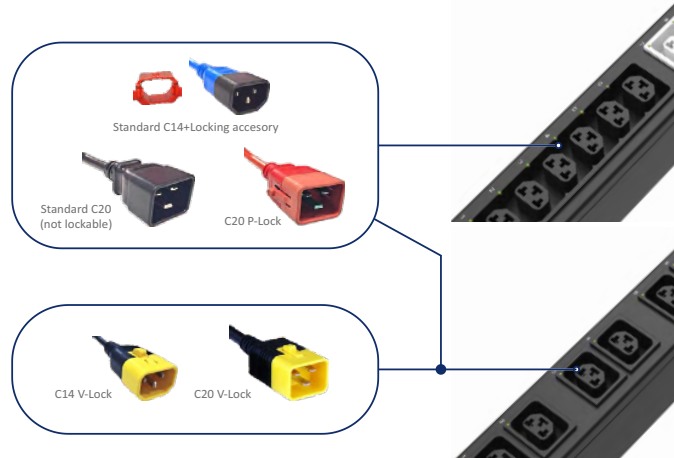
The new EMD31 is an environmental monitoring device that allows you to monitor temperature and humidity and status for 2 digital input sensors such as (water leak, door contact, motion, vibration, smoke and any other sensor with normally open or closed).

Sensors can be deployed in cascade up to 8 EMD sensors using network cables.



	BASIC	PM (Local Power Meter)	PIML (Per inlet monitoring)	SMART PIM (Per inlet monitoring)	SMART POS (Inlet monitoring + Outlet Switching)	SMART POM (Inlet + Outlet monitoring)	SMART POMS (Inlet + Outlet monitoring & switching)
Mechanical features Ultra light aluminium profile Full adjustable mounting options Low profile hydraulic magnetic breakers 10KA lcn C13/C19 combination socket lockable	✓	✓	✓	✓	✓	✓	✓
Inlet Energy Metering PDU input enery metering kWh PDU input power measurements (W, VA, VAR) PDU input (A, V, PF, HZ) measurments Circuit breaker monitoring Residual current monitoring (optional) 3 phase balance indicator		✓	✓	✓	✓	✓	✓
Securtiy Management Memory logs for historical data and graphics User and alarms tresholds customizable			✓	✓	✓	✓	✓
SNMP Controller PDU cascading (up to 16 PDUs) Hot swappable and replaceable controller Double Gigabit Ethernet port				✓	✓	✓	✓
Outlet control Remote On/Off by individual outlet or groups Power On/Off delay Sequential startup User level security assignable Individual LED x outlet status indicator					✓		✓
Outlet Metering PDU ouput enery metering kWh PDU output power measurements (W, VA, VAR) PDU output (A, V, PF, HZ) measurments						✓	✓
Environmental Metering Environmental sensor (Tem&Hum) cascading (up to 8) Door contact Smoke detection Vibration Motion sensor Water leakage User and alarms tresholds customizable			✓	✓	✓	✓	✓
Network and Security DHCP, IPv4 and IPv6, DNS, http / https, SSHv2, SNMP, v1 / v2c / v3, SNMP TRAPS / SETS / GETS, SMTP, Modbus , Telnet, TCP, RADIUS, Syslog, TLS 1.2, SNMP			✓	✓	✓	✓	✓

C13/C19 combination outlets compatible Power cords



No. OUTLETS	BASIC	PM (Local Power Meter)	PIML (Per inlet monitoring)	SMART PIM (Per inlet monitoring)	SMART POS (Inlet monitoring + Outlet Switching)	SMART POM (Inlet + Outlet monitoring)	SMART POMS (Inlet + Outlet monitoring + switching)
230V 16A - 1 PHASE							
12	IEX601216AH	IEXPM601216AH	IEXPIML601216AH	IEXPIM601216AH	IEXPOS601216AH	IEXPOM601216AH	IEXPOMS601216AH
12	IEX451216AV	IEXPM451216AV	IEXPIML451216AV	IEXPIM501216AV	IEXPOS501216AV	IEXPOM501216AV	IEXPOMS501216AV
18	IEX451816AV	IEXPM451816AV	IEXPIML451816AV	IEXPIM501816AV	IEXPOS501816AV	IEXPOM501816AV	IEXPOMS501816AV
24	IEX452416AV	IEXPM452416AV	IEXPIML452416AV	IEXPIM502416AV	IEXPOS502416AV	IEXPOM502416AV	IEXPOMS502416AV
30	IEX453016AV	IEXPM453016AV	IEXPIML453016AV	IEXPIM503016AV	IEXPOS503016AV	IEXPOM503016AV	IEXPOMS503016AV
36	IEX453616AV	IEXPM453616AV	IEXPIML453616AV	IEXPIM503616AV	IEXPOS503616AV	IEXPOM503616AV	IEXPOMS503616AV
230V 32A - 1 PHASE							
12	IEXCB601232AH	IEXCBPM601232AH	IEXCBPIML601232AH	IEXCBPIM601232AH	IEXCBPOS601232AH	IEXCBPOM601232AH	IEXCBPOMS601232AH
24	IEXCB602432AH	IEXCBPM602432AH	IEXCBPIML602432AH	IEXCBPIM602432AH	IEXCBPOS602432AH	IEXCBPOM602432AH	IEXCBPOMS602432AH
12	IEXCB451232AV	IEXCBPM451232AV	IEXCBPIML451232AV	IEXCBPIM501232AV	IEXCBPOS501232AV	IEXCBPOM501232AV	IEXCBPOMS501232AV
24	IEXCB452432AV	IEXCBPM452432AV	IEXCBPIML452432AV	IEXCBPIM502432AV	IEXCBPOS502432AV	IEXCBPOM502432AV	IEXCBPOMS502432AV
36	IEXCB453632AV	IEXCBPM453632AV	IEXCBPIML453632AV	IEXCBPIM503632AV	IEXCBPOS503632AV	IEXCBPOM503632AV	IEXCBPOMS503632AV
380V 16A - 3 PHASE							
12	IEX601216A3PH	IEXPM601216A3PH	IEXPIML601216A3PH	IEXPIM601216A3PH	IEXPOS601216A3PH	IEXPOM601216A3PH	IEXPOMS601216A3PH
24	IEX602416A3PH	IEXPM602416A3PH	IEXPIML602416A3PH	IEXPIM602416A3PH	IEXPOS602416A3PH	IEXPOM602416A3PH	IEXPOMS602416A3PH
18	IEX451816A3PV	IEXPM451816A3PV	IEXPIML451816A3PV	IEXPIM501816A3PV	IEXPOS501816A3PV	IEXPOM501816A3PV	IEXPOMS501816A3PV
24	IEX452416A3PV	IEXPM452416A3PV	IEXPIML452416A3PV	IEXPIM502416A3PV	IEXPOS502416A3PV	IEXPOM502416A3PV	IEXPOMS502416A3PV
36	IEX453616A3PV	IEXPM453616A3PV	IEXPIML453616A3PV	IEXPIM503616A3PV	IEXPOS503616A3PV	IEXPOM503616A3PV	IEXPOMS503616A3PV
280V 32A - 3 PHASE							
12	IEXCB601232A3PH	IEXCBPM601232A3PH	IEXCBPIML601232A3PH	IEXCBPIM601232A3PH	IEXCBPOS601232A3PH	IEXCBPOM601232A3PH	IEXCBPOMS601232A3PH
24	IEXCB602432A3PH	IEXCBPM602432A3PH	IEXCBPIML602432A3PH	IEXCBPIM602432A3PH	IEXCBPOS602432A3PH	IEXCBPOM602432A3PH	IEXCBPOMS602432A3PH
24	IEXCB452432A3PV	IEXCBPM452432A3PV	IEXCBPIML452432A3PV	IEXCBPIM502432A3PV	IEXCBPOS502432A3PV	IEXCBPOM502432A3PV	IEXCBPOMS502432A3PV
36	IEXCB453632A3PV	IEXCBPM453632A3PV	IEXCBPIML453632A3PV	IEXCBPIM503632A3PV	IEXCBPOS503632A3PV	IEXCBPOM503632A3PV	IEXCBPOMS503632A3PV
42	IEXCB454232A3PV	IEXCBPM454232A3PV	IEXCBPIML454232A3PV	IEXCBPIM504232A3PV	IEXCBPOS504232A3PV	IEXCBPOM504232A3PV	IEXCBPOMS504232A3PV

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