



enLOGIC

B&R Enclosures
INTELLIGENT PDUs



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Welcome to the Enlogic Energy Series of PDUs.

Introducing the industry's most innovative energy metering Rack Power Distribution Units (PDUs) designed to simplify rack management in your data centre.

The PDU is a small but vital part of the data centre energy supply chain -- the IT gear can't function without it. You'll find one in every IT rack, usually two. But as a small component in a much bigger purchasing decision for both IT and facilities, its often overlooked.

The Enlogic energy metering PDU is more than a simple power distribution unit and energy meter. Enlogic's intelligent PDUs sit within the rack actively monitoring the data centre environment, continually looking for threats from electrical circuit overloads and any physical and environmental conditions which might place critical IT computing loads at risk. These units provide comprehensive, accurate energy measurement data needed to efficiently utilise power resources, make informed capacity planning decisions, improve uptime, measure PUE (power usage effectiveness) and drive green data centre initiatives that could save you energy and money.

Making the right choice is critical to solving your specific rack management needs.

Length and Breadth

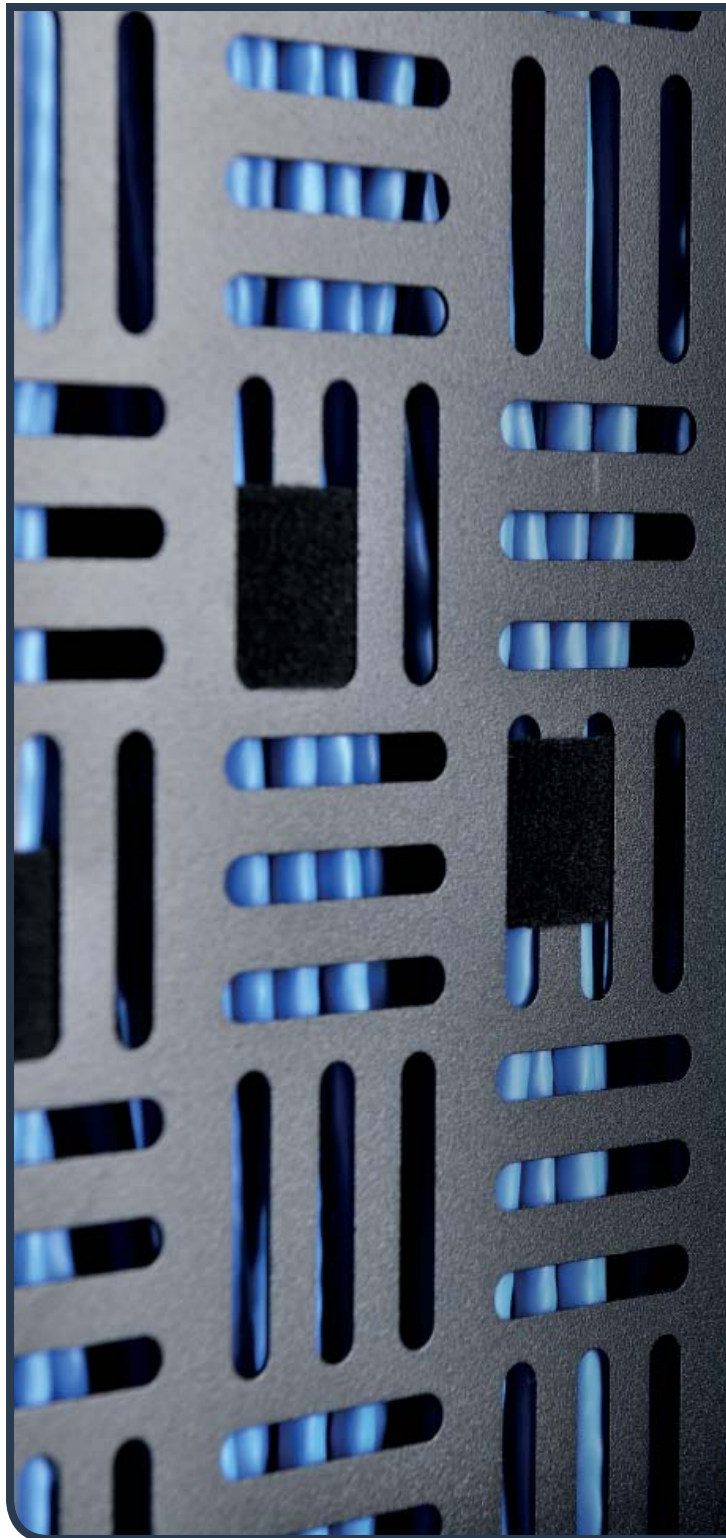
With more than 300 employees in different locations, we are ready and able to rise to the biggest challenge.

At B&R, we understand that technology and our people play an important role in making sure our products are of the highest quality. From material through to design and manufacturing, B&R do not compromise on quality. Our final product is not only functional but durable.

Our capabilities include:

- 3D Solidworks modelling
- Automated laser cutter, robotic punching and bending machines
- Robotic foamed in place gasket application machinery
- Automated powdercoating lines with four stage pre-treatment process
- Value add services
- Warehousing and distribution
- In-house testing including IP protection rating, salt spray, structural, climate and electrical conformity







Brilliant relationships

At B&R, our partnership with Enlogic marks a new era in power distribution.

Our partnership with Enlogic marks a new era in power distribution for B&R. In a world of big things, the little things in life are often overlooked. We are busy searching for the big idea, looking at the big picture, or chasing that big adventure. Especially in technology, business is driven by big data, powered by even bigger data centres. But what about the little things? Where would the big wheel be without the small cog that keeps it turning? It can be hard to see how the small things matter – until it all goes wrong.

In the complex world of the data centre, the little things are critical. Variations in temperature; improperly connected cables; the accidental overloading of branch circuits. With the potential for so many things to go wrong at rack level, it can start to feel as though the little things begin to snowball out of control. What you need is eyes and ears in every part of the data centre - or even better, a brain that can actively monitor and measure these individual events and give advanced warning before the problems escalate to failure.

Combine a B&R data cabinet with Enlogic power distribution and you have a smart rack capable of providing the information you require. B&R can preconfigure your smart rack by wiring sensors and pre-installing accessories as required. This can save you a great deal of time and we can package it together so you only need one part number.

PDU Features

Power and Energy Metering
(V, A, VA, W, kWh, pf) to +/- 1%
billing-grade accuracy.



Top or Front Power Cord
available in 1m, 3m and 5m.

Circuit Breaker Status Monitoring
provides active monitoring and
alarming of circuit breaker on/off
status (excludes EN1000 series).

**Premium Hydraulic-Magnetic
Branch Circuit Breakers**
stable at extreme hot aisle
temperatures.



oLED Display is large and
easy-to-view.



Ultra Low Profile Design

- Chassis depth is 40mm
on all EN1000 models and
50mm on others.
- Breaker depth is only 56mm
on most EN1000 models and
62mm on others.



**Hot Swappable Network
Management Card** for
industry best MTTR.

Environmental Monitoring
ready with support for up to
6 plug-and-play sensors.



**Daisy chain to manage and
monitor up to 4 PDUs and
24 environmental sensors**
through a single IP address.



**Colour-coded Outlets by
Breaker** for easy identification.



Adjustable Tool-less Mounting
and universal mounting
brackets included for ease of
installation.



Locking IEC Receptacles
provide secure power
connection when used with
optional locking power cords.

In-Line Meter Features



Power and Energy Metering
(V, A, VA, W, kWh, pf) to +/- 1%
billing-grade accuracy.

**Hot Swappable Network
Management Card** for
industry best MTTR.

**Daisy chain to manage
and monitor** up to 4 PDUs
and 24 environmental
sensors through a single
IP address.

Environmental Monitoring
ready for support for up to
6 plug-and-play sensors



Field Rewireable
top or front input and
output cords.

Metered PDUs (EN1000 Series)



Overview

Real-time metering and network monitoring of power loads for overload avoidance, capacity & load balancing and energy use optimisation.

FEATURES

PDU Energy Metering and Monitoring

- PDU level watt-hour energy metering (kWh)
- PDU level power measurements (W)
- Input phase level power measurements (V, A, VA, kWh, pf)
- Circuit breaker level current measurements
- High-accuracy, billing-grade metering capabilities
- Embedded memory log to record/view/report historical data
- User customisable alarm thresholds & notifications

Design

- Low profile, space saving design
- Ultra low profile circuit breakers on most models
- Adjustable tool-less mounting system
- Colour-coded and locking IEC receptacles and locking power cord compatible
- Field rewirable input cord for front or top mounting

Environmental & Security Management

- Optional plug & play environmental sensors including temperature, humidity, dry contact and water leak
- Rack access monitoring with door contact switch
- User customisable alarm thresholds and notifications













Network Management and Local Display Interface

- Fully featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, Telnet, SNMP, Syslog and email
- Strong encryption, passwords and advanced authorisation options including local permissions, LDAP/S and Active Directory
- Daisy chain up to 4 rack PDUs and 24 environmental sensors through a single IP address
- Largest in class, high visibility, oLED display

SELECTION GUIDE

Catalogue No.		Max Power	Total Outlets	Dimensions (mm)			Max. chassis depth at breaker (mm)
				Length	Width	Depth	
ARPREN1101	1-Phase	3.84kVA	24	1065	55	44	n/a
ARPREN1105		7.68kVA	36	1730	55	44	56
ARPREN1113		7.68kVA	42	1826	55	44	56
ARPREN1119	3-Phase	11.52kVA	42	1730	55	44	n/a
ARPREN1120		23.04kVA	36	1730	55	50	74
ARPREN1111		23.04kVA	42	1826	55	50	74
ARPREN1112		23.04kVA	48	1826	55	44	74

TECHNICAL DATA

Catalogue No.	Outlet Configuration	Input Plug Type
ARPREN1101	 (24) C13	IP66 AS/NZS3123
ARPREN1105	 (30) C13  (6) C19	
ARPREN1113	 (36) C13  (6) C19	
ARPREN1119	 (36) C13  (6) C19	
ARPREN1120	 (24) C13  (12) C19	
ARPREN1111	 (30) C13  (12) C19	
ARPREN1112	 (48) C13	

Metered, Outlet Switch PDU (EN2000 Series)



Overview

Remote outlet on/off switching for power-up sequencing, remote power cycling and outlet use management combined with all features of the EN1000 Series.

FEATURES

PDU Energy Metering and Monitoring

- PDU level watt-hour energy metering (kWh)
- PDU level power measurements (W)
- Input phase level power measurements (V, A, VA, kWh, pf)
- Circuit breaker level current measurements
- High-accuracy, billing-grade metering capabilities
- Embedded memory log to record/view/report historical data
- User customisable alarm thresholds & notifications

Outlet Level Switching

- Remote on/off power control by individual outlet
- User-defined power-on time delay to sequence IT equipment
- Automatic sequencing to avoid inrush current overload
- Outlet level user security with assignable roles and user access

Design

- Low profile, space saving design
- Ultra low profile circuit breakers on most models
- Adjustable tool-less mounting system
- Colour-coded and locking IEC receptacles and locking power cord compatible
- Field rewirable input cord for front or top mounting

Environmental & Security Management

- Optional plug & play environmental sensors including temperature, humidity, dry contact and water leak
- Rack access monitoring with door contact switch
- User customisable alarm thresholds and notifications

Network Management and Local Display Interface

- Fully featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, Telnet, SNMP, Syslog and email
- Strong encryption, passwords and advanced authorisation options including local permissions, LDAP/S and Active Directory
- Daisy chain up to 4 rack PDUs and 24 environmental sensors through a single IP address
- Largest in class, high visibility, oLED display

Circuit Breaker Status Monitoring

- Active monitoring and alarming of circuit breaker on/off status

Metered, Outlet Switch PDU (EN2000 Series)



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SELECTION GUIDE

Catalogue No.		Max Power	Total Outlets	Dimensions (mm)			Max. chassis depth at breaker (mm)
				Length	Width	Depth	
ARPREN2101	1-Phase	3.84kVA	12	1065	55	50	50
ARPREN2105		7.68kVA	22	1730	55	50	62
ARPREN2113		7.68kVA	24	1826	55	50	62
ARPREN2103		7.68kVA	24	1730	55	50	62
ARPREN2102		7.68kVA	32	1826	55	50	80
ARPREN2110	3-Phase	11.52kVA	24	1730	55	50	n/a
ARPREN2111		23.04kVA	24	1826	55	50	80
ARPREN2112		23.04kVA	24	1826	55	50	80

TECHNICAL DATA

Catalogue No.	Outlet Configuration	Input Plug Type
ARPREN2101	(12) C13	IP66 AS/NZS3123
ARPREN2105	(18) C13 (4) C19	
ARPREN2113	(20) C13 (4) C19	
ARPREN2103	(24) C13	
ARPREN2102	(32) C13	
ARPREN2110	(18) C13 (6) C19	
ARPREN2111	(12) C13 (12) C19	
ARPREN2112	(24) C13	

Outlet Metered PDU (EN5000 Series)



Overview

Individual outlet power and energy metering combined with all features of the EN1000 series.

FEATURES

PDU Energy Metering and Monitoring

- PDU level watt-hour energy metering (kWh)
- PDU level power measurements (W)
- Input phase level power measurements (V, A, VA, kWh, pf)
- Circuit breaker level current measurements
- High-accuracy, billing-grade metering capabilities
- Embedded memory log to record/view/report historical data
- User customisable alarm thresholds & notifications

Outlet Level Energy Metering

- Outlet level watt-hour energy metering (kWh)
- Outlet level power measurements (V, A, VA, kWh, pf)
- Outlet level information for Green Grid Level 3 PUE calculations

Design

- Low profile, space saving design
- Ultra low profile circuit breakers on most models
- Adjustable tool-less mounting system
- Colour-coded and locking IEC receptacles and locking power cord compatible
- Field rewirable input cord for front or top mounting

Environmental & Security Management

- Optional plug & play environmental sensors including temperature, humidity, dry contact and water leak
- Rack access monitoring with door contact switch
- User customisable alarm thresholds and notifications

Network Management and Local Display Interface

- Fully featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, Telnet, SNMP, Syslog and email
- Strong encryption, passwords and advanced authorisation options including local permissions, LDAP/S and Active Directory
- Daisy chain up to 4 rack PDUs and 24 environmental sensors through a single IP address
- Largest in class, high visibility, oLED display

Circuit Breaker Status Monitoring

- Active monitoring and alarming of circuit breaker on/off status

Outlet Metered PDU (EN5000 Series)



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SELECTION GUIDE

Catalogue No.		Max Power	Total Outlets	Dimensions (mm)			Max. chassis depth at breaker (mm)
				Length	Width	Depth	
ARPREN5101	1-Phase	3.84kVA	12	1065	55	50	50
ARPREN5105		7.68kVA	22	1730	55	50	62
ARPREN5113		7.68kVA	24	1826	55	50	62
ARPREN5103		7.68kVA	24	1730	55	50	62
ARPREN5102		7.68kVA	32	1826	55	50	80
ARPREN5110	3-Phase	11.52kVA	24	1730	55	50	n/a
ARPREN5111		23.04kVA	24	1826	55	50	80
ARPREN5112		23.04kVA	24	1826	55	50	80

TECHNICAL DATA

Catalogue No.	Outlet Configuration	Input Plug Type
ARPREN5101	(12) C13	IP66 AS/NZS3123
ARPREN5105	(18) C13 (4) C19	
ARPREN5113	(20) C13 (4) C19	
ARPREN5103	(24) C13	
ARPREN5102	(32) C13	
ARPREN5110	(18) C13 (6) C19	
ARPREN5111	(12) C13 (12) C19	
ARPREN5112	(24) C13	

Outlet Metered, Outlet Switched PDU (EN6000 Series)



Overview

Comprehensive management solution includes features of both the EN2000 and EN5000 Series.

FEATURES

PDU Energy Metering and Monitoring

- PDU level watt-hour energy metering (kWh)
- PDU level power measurements (W)
- Input phase level power measurements (V, A, VA, kWh, pf)
- Circuit breaker level current measurements
- High-accuracy, billing-grade metering capabilities
- Embedded memory log to record/view/report historical data
- User customisable alarm thresholds & notifications

Outlet Level Switching

- Remote on/off power control by individual outlet
- User-defined power-on time delay to sequence IT equipment
- Automatic sequencing to avoid inrush current overload
- Outlet level user security with assignable roles and user access

Outlet Level Energy Metering

- Outlet level watt-hour energy metering (kWh)
- Outlet level power measurements (V, A, VA, kWh, pf)
- Outlet level information for Green Grid Level 3 PUE calculations

Design

- Low profile, space saving design
- Ultra low profile circuit breakers on most models
- Adjustable tool-less mounting system
- Colour-coded and locking IEC receptacles and locking power cord compatible
- Field rewirable input cord for front or top mounting

Environmental & Security Management

- Optional plug & play environmental sensors including temperature, humidity, dry contact and water leak
- Rack access monitoring with door contact switch
- User customisable alarm thresholds and notifications

Network Management and Local Display Interface

- Fully featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, Telnet, SNMP, Syslog and email
- Strong encryption, passwords and advanced authorisation options including local permissions, LDAP/S and Active Directory
- Daisy chain up to 4 rack PDUs and 24 environmental sensors through a single IP address
- Largest in class, high visibility, oLED display

Circuit Breaker Status Monitoring

- Active monitoring and alarming of circuit breaker on/off status

Outlet Metered, Outlet Switched PDU (EN6000 Series)



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SELECTION GUIDE

Catalogue No.		Max Power	Total Outlets	Dimensions (mm)			Max. chassis depth at breaker (mm)
				Length	Width	Depth	
ARPREN6101	1-Phase	3.84kVA	12	1065	55	50	50
ARPREN6105		7.68kVA	22	1730	55	50	62
ARPREN6113		7.68kVA	24	1826	55	50	62
ARPREN6103		7.68kVA	24	1730	55	50	62
ARPREN6102		7.68kVA	32	1826	55	50	80
ARPREN6110	3-Phase	11.52kVA	24	1730	55	50	n/a
ARPREN6111		23.04kVA	24	1826	55	50	80
ARPREN6112		23.04kVA	24	1826	55	50	80

TECHNICAL DATA

Catalogue No.	Outlet Configuration	Input Plug Type
ARPREN6101	(12) C13	IP66 AS/NZS3123
ARPREN6105	(18) C13 (4) C19	
ARPREN6113	(20) C13 (4) C19	
ARPREN6103	(24) C13	
ARPREN6102	(32) C13	
ARPREN6110	(18) C13 (6) C19	
ARPREN6111	(12) C13 (12) C19	
ARPREN6112	(24) C13	

Inline Energy Meter (EZ1000 Series)



Overview

Energy metering device adds EN1000 Series capabilities for existing basic PDUs or stand-alone equipment.

FEATURES

PDU Energy Metering and Monitoring

- PDU level watt-hour energy metering (kWh)
- PDU level power measurements (W)
- Input phase level power measurements (V, A, VA, kWh, pf)
- Circuit breaker level current measurements
- High-accuracy, billing-grade metering capabilities
- Embedded memory log to record/view/report historical data
- User customisable alarm thresholds & notifications

Environmental & Security Management

- Optional plug & play environmental sensors including temperature, humidity, dry contact and water leak
- Rack access monitoring with door contact switch
- User customisable alarm thresholds and notifications

Network Management and Local Display Interface

- Fully featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, Telnet, SNMP, Syslog and email
- Strong encryption, passwords and advanced authorisation options including local permissions, LDAP/S and Active Directory
- Daisy chain up to 4 rack PDUs and 24 environmental sensors through a single IP address
- Largest in class, high visibility, oLED display

Inline Energy Meter (EZ1000 Series)



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SELECTION GUIDE

Catalogue No.	Max Power	Input Plug Type	Dimensions (mm)		
			Length	Width	Depth
ARIMEZ1151	3.84kVA	IP66 AS/NZS3123	350	55	110
ARIMEZ1152	7.68kVA		350	55	110
ARIMEZ1154	15.12kVA		445	55	110
ARIMEZ1156	11.52kVA	IP66 AS/NZS3123	350	55	110
ARIMEZ1157	23.04kVA		350	55	110
ARIMEZ1159	45.36kVA		445	55	110

Equipment Jumper Power Cords



Overview

Locking power leads that lock into the PDU and into other IT equipment.

FEATURES

- Provide protection against accidental power loss of attached IT equipment when used with any Enlogic PDU
- The locking IEC plugs into the PDU outlet with a locking tab feature very similar to the method used in standard ethernet cables to positively secure the connection.
- The cord connector positively locks into the attached equipment power inlet without the need for supplemental retaining clips.

Equipment Jumper Power Cords



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SELECTION GUIDE

Catalogue No.	PDU side plug	Connection	Rating	Cable length	Colour			
ARPCEP8702	C14 Locking Style	C13 Universal locking style	10A, 250V	0.6m	Black			
ARPCEP8702B					Blue			
ARPCEP8702G					Grey			
ARPCEP8704				C14 Locking Style	C13 Universal locking style	10A, 250V	1.2m	Black
ARPCEP8704B								Blue
ARPCEP8704G								Grey
ARPCEP8706							1.8m	Black
ARPCEP8706B								Blue
ARPCEP8706G								Grey
ARPCEP8724	C20 Locking Style	C13 Universal locking style	10A, 250V	1.2m	Black			
ARPCEP8724B					Blue			
ARPCEP8724G					Grey			
ARPCEP8712	C20 Locking Style	C19 Universal locking style	16A, 250V	0.6m	Black			
ARPCEP8712B					Blue			
ARPCEP8712G					Grey			
ARPCEP8714				C20 Locking Style	C19 Universal locking style	16A, 250V	1.2m	Black
ARPCEP8714B								Blue
ARPCEP8714G								Grey
ARPCEP8716							1.8m	Black
ARPCEP8716B								Blue
ARPCEP8716G								Grey

* Contains pack of 6 cords



ALARM BEACON

Enlogic's alarm beacons have a magnetic base so it can be easily attached to the top of the rack. The alarm beacon can be added to any sensor port of any Enlogic EN series PDU or EZ series Inline Energy Meter.

Catalogue No.	Description
ARPRAEA9101	Alarm Beacon

TEMPERATURE SENSORS

Enlogic's temperature and humidity sensors are designed to add comprehensive environmental monitoring to any Enlogic EN Series PDU or EZ Series Inline Energy Meter. The temperature and humidity sensor monitors the temperature and relative humidity in the data centre and transfers the data to the control centre.

Catalogue No.	Description
ARPRAEA9102	Temperature sensor only
ARPRAEA9103	Temperature / Humidity sensor
ARPRAEA9105	3 Temperature, 1 Humidity sensor combination

INPUT SENSOR HUB

Enlogic's 3 Sensor Input Hub allows for 3 additional sensor ports to be added to either sensor port of any Enlogic EN Series PDU or EZ Series Inline Energy Meter.

Catalogue No.	Description
ARPRAEA9106	3 sensor inputs

DOOR SWITCH SENSOR

Enlogic's door switch is a manual door switch that can be added to either sensor port of any Enlogic EN Series PDU or EZ Series Inline Energy Meter.

Catalogue No.	Description
ARPRAEA9109	Sensor for door switch

DRY CONTACT INPUT

Enlogic's dry contact input can be connected to other auxillary equipment and feed the information through your network.

Catalogue No.	Description
ARPRAEA9110	Cable

SPOT FLUID SENSOR

Spot fluid sensor monitors a remote location for the presence of any liquid with resistivity of less than 2M Ohms per cm (including distilled water) and transfers the data to the control centre.

Catalogue No.	Description
ARPRAEA9111	Complete with sensor and cable

ROPE FLUID SENSOR

The rope fluid sensor monitors for early detection of liquid with a resistivity of less than 2M Ohms per cm (including distilled water) in the monitored area along the entire length of the rope.

Catalogue No.	Description
ARPRAEA9112	Complete with sensor and cable

SMOKE SENSOR

The photoelectric smoke sensor detects smoke in the cabinet and sends the alarm signal through the EN Series PDU or EZ series Inline Meter.

Catalogue No.	Description
ARPRAEA9116	Sensor

SERIAL CONNECTION CABLE

The serial connection cable allows for a direct connection to the PDU for easy setup before connecting to the network.

Catalogue No.	Description
ARPRAEA9116	Includes 3m of cable

RITTAL /HP CABINET BRACKET

A bracket that allows an Enlogic PDU to fit in Rittal and HP data cabinets.

Catalogue No.	Description
ARPRAEA9120	Bracket to suit Rittal / HP cabinets





Brilliant

product solutions

**Our people are the best in the business.
Experienced professionals with a passion for
problem solving and a flair for innovation.**

At B&R, we not only manufacture and supply a range of enclosure solutions, but we can customise the design to be 100% fit-for-purpose and ready for installation.

We understand that time is a major consideration on any project and work with our customers to provide products on time and on budget. With two value add divisions located within our manufacturing facilities at Heathwood, Brisbane and Riverwood, Sydney.

Our services include:

- Fit out to customer specifications
- 3rd party stock control to reduce turnaround times
- Installation of equipment including cooling systems, wiring and cable management, blanking panels, trays, drawers, shelves, power distribution equipment, placement of rack rails
- Delivery service option which places the rack, unpacked into an equipment room or suite and includes removal of all packaging material

What this means for our customers:

- Customised product to suit the project
- Shorter lead times
- Cost reduction by providing a fully integrated solution
- Available for small or large quantities
- One point of contact
- Standard product straight off the floor

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