ELEVATE
Future Faster

FAMILY BROCHURE

Intelligent PDU

Contents

Our Standard is Higher

Behind each Elevate solutions sits a principle to offer a higher standard of performance, features or component choice as standard when compared with alternatives in the market.

The Elevate iPDU rack mount series delivers on this promise by offering the following:

- Local & Remote Monitoring: Measure and manage energy consumption from both local and remote locations with precision
- Remote Socket Switching: Remotely control each individual socket to optimize energy distribution and usage
- Onboard TFT screen: Local reporting and status indication
- Multi-Phase Support: Single, dual, or three-phase configurations, capable of handling loads up to 125 Amps
- Environmental Monitoring: Equipped with temperature and humidity sensor ports for enhanced environmental tracking
- Daisy Chainable: Connect and monitor up to 32 devices via a single IP address, simplifying large-scale installations
- UK manufactured: Short lead time typically 10 days, responsive supply chain, Elevate branded

When it comes to service Elevate resets that bar also, with short lead times, desk-based design proposal support, and highly flexible production with low minimum, manufacturing quantities for bespoke specifications, colours, or branding.

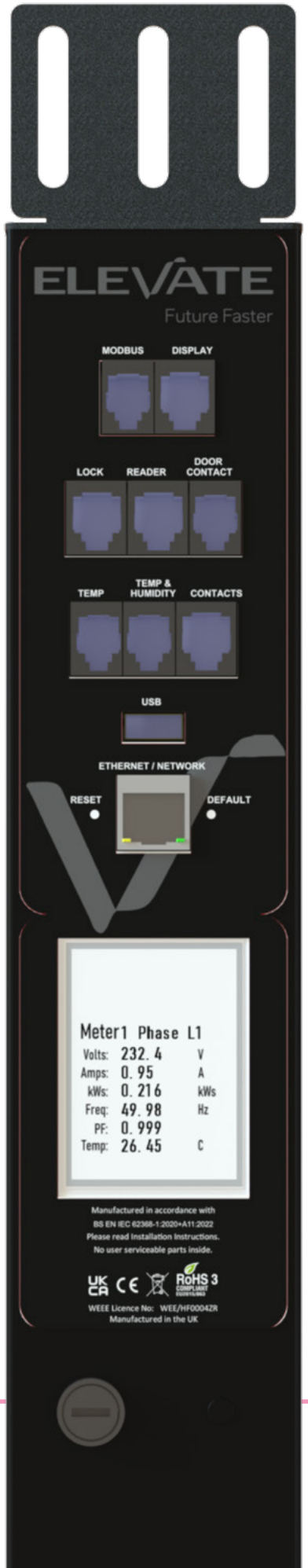
The Elevate Design Difference

Elevate INT3 series 3rd Generation intelligent Power Distribution Unit s(PDU) are designed to provide advanced, accurate, and comprehensive measurement and monitoring of energy utilisation at both strip and socket level.

A maximum of 48 C13 and C19 sockets powered by EN60309 Com16 or Com32 plugs, in single or three-phase options can be included per strip, alternative socket options include UK, UK left-angled and right-angled, and Schuko sockets.

Elevate PDU's will also be available with Universal C13/C19 sockets by Q2 this year, making customer choice much easier.

- Single, Dual or Three Phase Monitoring
- Overall Energy Measurement up to 125A
- Individual Socket Monitoring Amps, kWh, VA
- Supports up to 48 Sockets including Schucko, UK, C13 Locking or C19 Locking
- Accuracy of better than 99%
- Set Alerts for critical metrics via Email or SNMP Traps
- Environmental Ports for Temp and Humidity Sensors
- Access Control Ports for Electronic Door Handles / Pinpads / Card Readers and Door Contacts
- USB Port (for Web Camera, Auto Config, and 5VDC PSU)
- Modbus Ports for Daisy Chaining up to 32 PDUs from a single IP Address



- Local & Remote Energy Monitoring: Measure and manage energy consumption from both local and remote locations with precision.
- Individual Socket Monitoring: Monitor energy usage at the socket level, tracking metrics like amps, VA, and kWh.
- Remote Socket Switching: Remotely control each individual socket to optimize energy distribution and usage.
- Multi-Phase Support: Available in single, dual, or three-phase configurations, capable of handling loads up to 125 Amps
- High Capacity Power Strips Can be customized with up to 48 outlets to fit any type of socket and mains lead termination.
- Environmental Monitoring: Equipped with temperature and humidity sensor ports for enhanced environmental tracking.
- Security & Access Control: Integrated security ports and volt-free connections provide flexibility in access control.
- Daisy Chainable: Connect and monitor up to 32 devices via a single IP address, simplifying large-scale installations.

Key Elements of the Intelligent PDUs

Modbus Port

High Speed MODBUS RS 485, Daisy chain up to 32 PDUs

Cabinet Lock Control Port

Connect Electronic Handles

Cabinet Door Card Reader Port

Connect Card Reader or Electronic Handle Card Reader aspect

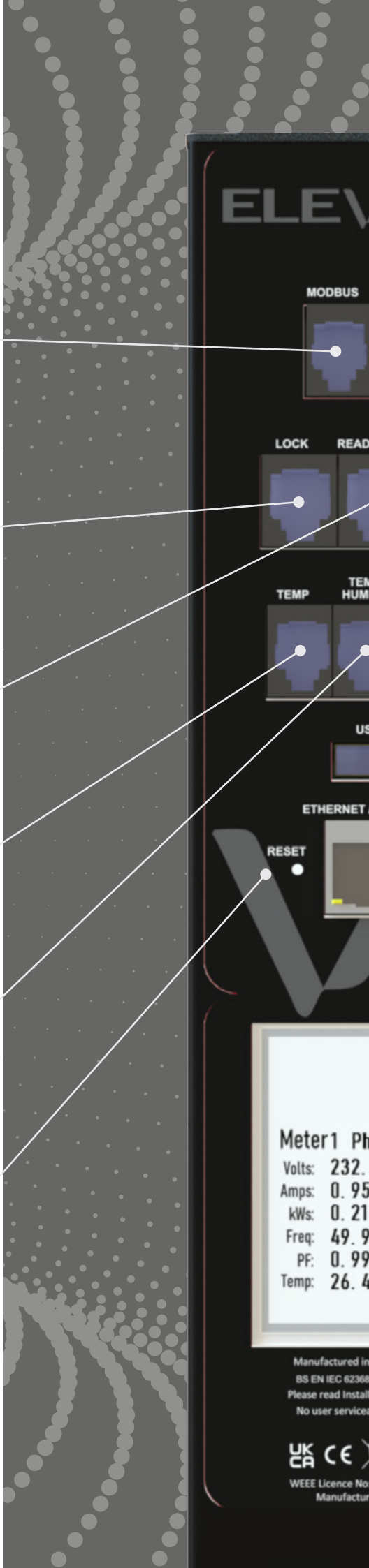
Temperature Sensor Port

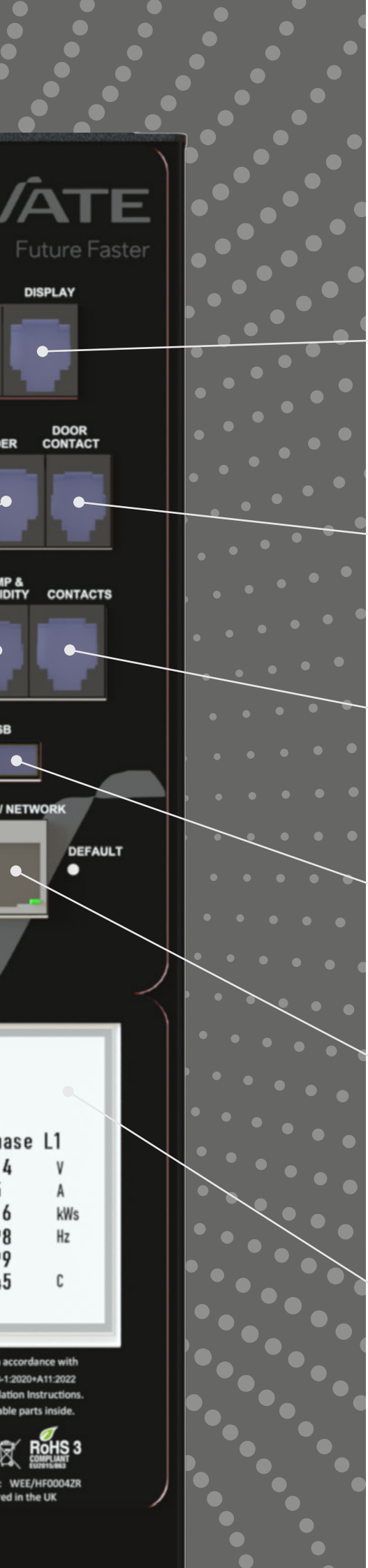
Connect up to 8 daisy chained sensors

Humidity Sensor Port

Connect Humidity / Temperature Sensor

Reset Button





Remote Display Port

Connect a secondary RGB display for ease of viewing

Cabinet Door Contact Monitoring Port

Connect door contacts

Voltage Free Contacts

3 sets of Volt Free Contacts for connection of any accessory such as leak detection

USB 2.0 Port

Used for small PIN camera or Automatic Config upload

Ethernet Port

IEEE 802.3 with full 10/100 Base-T network capability

Local TFT “Touch Screen Display”

IEEE 802.3 with full 10/100 Base-T network capability

Specification Guide

When specifying an intelligent Power Distribution Unit (PDU) several factors should be carefully considered to ensure optimal performance, reliability, and scalability.

Power Requirements

Load Capacity:

Determine the total power load requirements of your data centre infrastructure. The PDU should be rated for the appropriate voltage and current capacity to support the connected equipment. Choose PDUs that can handle the full load, with an extra margin for safety.

Single-Phase or Three-Phase:

Depending on the power requirements, you will need to choose between single-phase or three-phase PDUs. Three-phase PDUs are typically more efficient for high-power environments like data centres.

Amperage:

Ensure the PDU can handle the required amperage, typically from 16 Amps to 63 Amps or more.

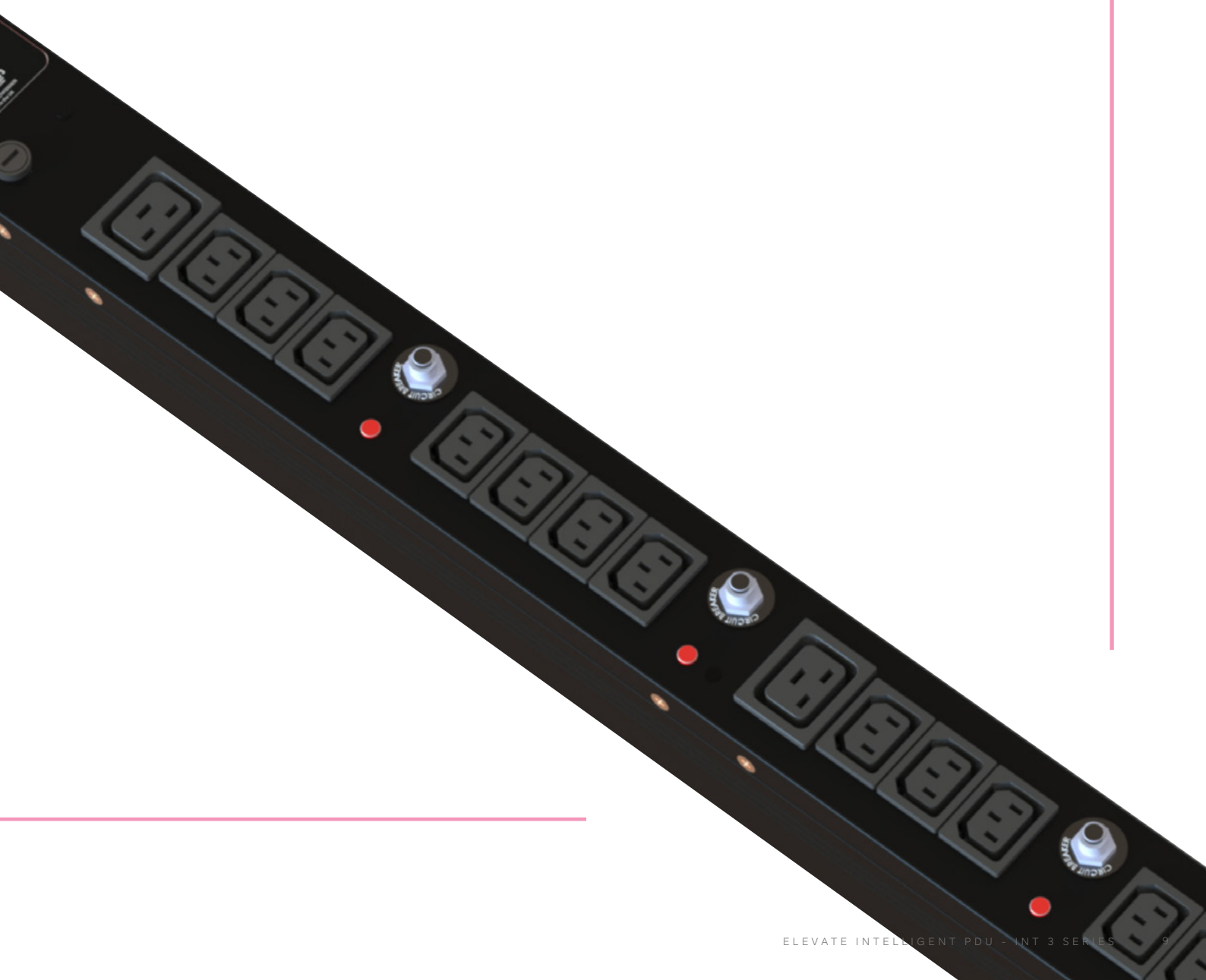
Energy Monitoring and Efficiency

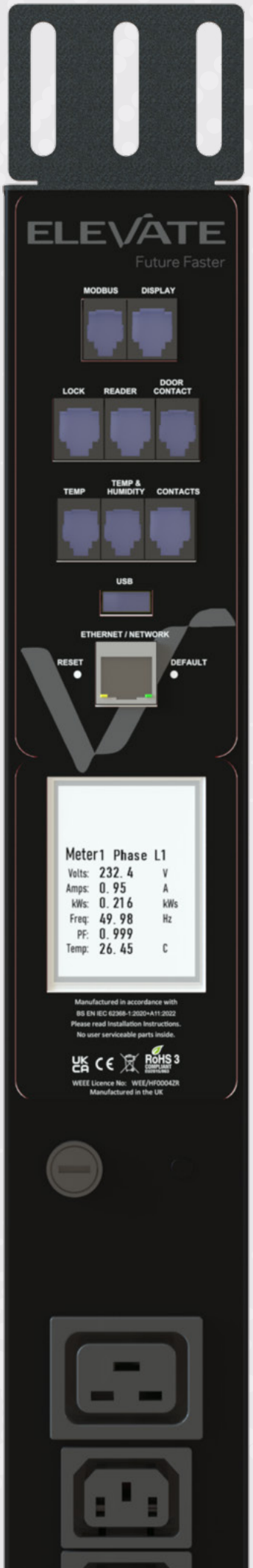
Real-time Monitoring:

Intelligent PDUs can provide detailed energy consumption data at both the overall unit and individual socket level. These include features like voltage, current (amps), kilowatts (kW), power factor, frequency, and kWh to optimize energy efficiency.

Accuracy:

Accuracy is key, especially for real-time monitoring, as the customer will rely on this data for load balancing and energy management. A PDU with better than 99% accuracy is typically recommended.





Remote Monitoring and Control

Web Interface / SNMP / Telnet:

Elevate PDUs offer remote monitoring capabilities, through a built-in web browser, SNMP, or Telnet. This allows the monitoring of the PDU from anywhere, whether on-site or remotely.

Alarm / Notification Systems:

Elevate PDUs provide alarms or notifications for issues like overcurrent, voltage fluctuations, or temperature thresholds, so issues can be quickly reported and addressed before they impact operations.

Remote Power Cycling / Switching:

INT3 intelligent PDUs allow remote switching of individual sockets, which can be useful for power cycling servers or network devices without needing to be physically present.

Scalability and Flexibility

Daisy-Chaining Capability:

For large data centres with many racks, Elevate PDUs that support daisy chaining, which allows multiple PDUs to be managed under a single IP address. This can simplify network management.

Multi-Outlet Options:

PDUs are available with multiple outlet configurations to support a wide range of equipment types, and offer different socket types.

Form Factor and Mounting Options

Rack-Mountable:

Data centre PDUs are typically designed to be rack-mounted. Elevate the PDU can be installed onto DCR 19” profiles using brackets or onto PDU Cable Tray.

Environmental Monitoring Integration

Temperature and Humidity Sensors:

Elevate intelligent PDUs have environmental monitoring ports that allow the connection of temperature and humidity sensors. This helps to monitor the cooling efficiency and conditions within the data centre, ensuring optimal performance and preventing overheating.

Security Features:

Environmental ports and security features such as voltage-free connections or access control integration should also be considered for secure and optimal data centre management.

Redundancy and Reliability

Built-in Circuit Breakers or Fused Sockets:

Elevate INT3 PDUs have the appropriate overcurrent protection with built-in circuit Fused Neons to prevent electrical overloads and ensure safe operation.

Compliance and Certification

Safety Standards:

Elevate iPDU series meets local and international safety standards (such as UL, CE, or IEC certification).

Cost Considerations

Initial Cost vs. Long-Term Savings:

While intelligent PDUs have a higher upfront cost compared to basic models, the benefits they provide in terms of energy monitoring, efficiency, and remote control can lead to substantial operational cost savings over time.

Security Features

Access Control:

Elevate PDU's provide security access through user authentication, audit logs, and secure remote access (e.g., via SSH, SNMPv3) to protect against unauthorized access to critical systems. Two levels of control access are available

By considering these factors, you can ensure that the intelligent PDU selected is well-suited to your data center's needs and can help optimize energy usage, improve operational efficiency, and maintain uptime.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MODBUS
DISPLAY
LOCK
READER
DOOR CONTACT
TEMP
TEMP & HUMIDITY
CONTACTS
USB
ETHERNET / NETWORK
RESET
DEFAULT
Meter1 Phase L1
Volts: 232.4 V
Amps: 0.95 A
kWs: 0.216 kWh
Freq: 49.98 Hz
PF: 0.999
Temp: 26.45 C
CIRCUIT BREAKER

Part Code Ref Guide

The Elevate part codes are made up as per the chart here.

Management Level

INT1 = Local and remote overall powering

INT3 = Local and remote overall and per socket monitoring and individual outlet switching

Special Requests

INT2 = Local and remote overall and per socket monitoring

Outlets: Quantity & Type

Most common types

C13 = 10A

C19 = 16A

SCH = Schuko

UKL = UK 13A Left*

UKR = UK 13A Right*

Special Requests

C13L = 13A Locking

C19L = 13A Locking

Length of Lead

and (T) top or (B) bottom - (just Length for Horizontal)

555-1V-Com16-INT1-12C13-4C19-3T

Phase and Orientation

1V = Single Phase Vertical
3V = 3 Phase Vertical
1H = Single Phase Horizontal
3H = 3 Phase Horizontal

555-500-100 Temperature Sensor Kit

555-500-200 Humidity Sensor

555-500-800 Door Sensor Kit

Input & Power

Most common types

Com16 = 16A (Commando)

Com32 = 32A (Commando)

Special Requests

C14 = 10A

C20 = 16A

UK = 13A

Quantity

In multiples of 4

2nd Outlet Option

If a 3rd and a 4th required, just insert additional requirements as before

*Selecting Right - this will mean the earth pin on the 3 pin plug is to the right and the lead will be to the left.

*Selecting Left - this will mean the earth pin on the 3 pin plug is to the left and the lead will be to the right.

The Elevate part code table, with the standard range being INT3 Type iPDU's.

3m Lead is standard with but 5m also available.

Type	Phase		Input and Power		Management Level		Outlets Block 1					Outlets Block 2	Cable	
	Single Phase Vertical	3 Phase Vertical	Commando 16A	Commando 32A	INT1	INT3	Schuko	C13	C19	C13 Locking	C19 Locking	C19	Length	Position
555	1V		✓	✓		✓	8SCH	8C13	8C19	8C13L	8C19L	4C19	3	T / B
555	1V		✓	✓	✓	✓	12SCH / 16SCH	12C13 / 16C13	12C19 / 16C19	12C13L / 16C13L	12C19L / 16C19L	4C19	3	T / B
555	1V		✓	✓	✓	✓	18SCH	18C13	18C19	18C13L	18C19L	6C19	3	T / B
555	1V		✓	✓	✓	✓	20SCH	20C13 / 24C13	20C19	20C13L	20C19L	4C19	3	T / B
555	1V	3V	✓	✓	✓	✓		18C13 / 21C13				6C19 / 3C19	3	T / B

Standard baseline part codes are shown below. Other options are available.

Part Number	Description
555-1V-Com16-INT3-16C13-4C19-3T	Elevate 1P Vertical Intelligent PDU (INT3) 16x C13 4x C19 16A EN60309 3m Top-Fed
555-1V-Com32-INT3-16C13-4C19-3T	Elevate 1P Vertical Intelligent PDU (INT3) 16x C13 4x C19 32A EN60309 3m Top-Fed
555-1V-Com16-INT3-20C13-4C19-3T	Elevate 1P Vertical Intelligent PDU (INT3) 20x C13 4x C19 16A EN60309 3m Top-Fed
555-1V-Com32-INT3-20C13-4C19-3T	Elevate 1P Vertical Intelligent PDU (INT3) 20x C13 4x C19 32A EN60309 3m Top-Fed
555-1V-Com32-INT3-24C13-8C19-3B	Elevate 3P Vertical Intelligent PDU (INT3) 24x C13 8x C19 32A EN60309 3m Bottom-Fed
555-1V-Com32-INT3-24C13-12C19-3B	Elevate 3P Vertical Intelligent PDU (INT3) 24x C13 12x C19 32A EN60309 3m Bottom-Fed
555-3V-Com16-INT3-21C13-3C19-3B	Elevate 3P Vertical Intelligent PDU (INT3) 21x C13 3x C19 16A EN60309 3m Bottom Fed
555-3V-Com32-INT3-21C13-3C19-3B	Elevate 3P Vertical Intelligent PDU (INT3) 21x C13 3x C19 32A EN60309 3m Bottom Fed

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