



METERED
INPUT

MANAGED



METERED
OUTLET

RACK
SENSORS



iPDU

INTELLIGENT POWER DISTRIBUTION UNITS

BROCHURE

ArcTiv iPDU

PRODUCT FEATURES



Low-Profile Design

Hydraulic circuit breakers and flush mount chassis provide greater access to the IT equipment.



Color Configurable

Multiple chassis and outlet module color options to differentiate between A & B feeds with 3 phase branches.



Modular Design

Hot-swap, field replaceable network and outlet modules to maintain power continuity to IT equipment.



Outlet Level Control

Monitored and switched outlets for device reboot & turn-off unused outlets with individual access control rights.



2.8" LCD Display

Easy to read power and alerts without opening the rear rack doors, saving time when conducting row walk-throughs.



Daisy Chain

Manage multiple iPDU's and rack sensors from a single IP address, reducing cabling and networking costs.



Flexible Mounting

Vertical (0U) and horizontal (1U) mounting configurations available in metered and managed models.



Locking C13 Outlets

Built-in C13 cable retention latches to secure equipment power cables and reduce accidental outages.



2 Year Warranty

High quality design and components with 100% outlet testing and burn-in before shipment.



High-Density Outlets

Up to 42 outlets per metered and managed models, supporting the latest servers and networking devices.



Rack Sensors

Remotely manage rack environment with access control and temperature, humidity, water and door sensors.



1% Accuracy

Monitor power consumption to accurately measure PUE, balance loads and optimize data center performance.

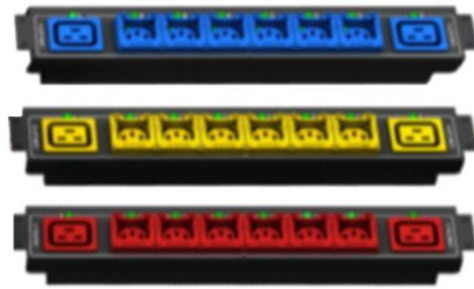


ArcTiv iPDU

APPLICATION BENEFITS

Minimize Your Total Rack Management Costs

ArcTiv iPDU's are available in a wide range of colors and configurations and are simple to manage throughout the application lifecycle with field upgradable modular components.



Easy Installation

Reduce service and maintenance costs with tool-less installation and greater access to IT equipment.

Greater Organization

Identify, secure and manage power cables with color coded PDU's and locking outlets.

Peace of Mind

Modular components which can be field upgraded or replaced under standard warranty.

Increase Your Data Center Performance

ArcTiv iPDU's serve as the interface for rack power monitoring and management, access control and environmental sensors, allowing data centers to optimize PUE and prevent downtime.



Power Management

Measure input and outlet power, turn-off unused outlets, reboot devices and balance loads.

Environmental Management

Sensors integrate with server racks & cabinets to provide complete environment management.

Data Center Optimization

Compatible with DCIM's to monitor rack performance, automate alerts and optimize Data Center PUE.

Easy Installation

REDUCE RACK MAINTENANCE COSTS



0U iPDU Supports Rear Rack Equipment Service & Maintenance

Low-Profile Design

Challenge: Equipment maintenance often requires access to the rear of the rack. In standard racks, large PDU's need to be removed, resulting in potential downtime of the network.



ArcTiv Solution:

Low-profile 0U iPDU's support servicing IT equipment without uninstalling the PDU, ensuring maximum uptime.



16A Low-Profile Hydraulic Breaker



56mm



52mm

Steel, Flush-Mount Chassis Design

Flexible Mounting

Challenge: Server racks and IT cabinets require different PDU dimensions, configurations and mounting tools based on in-rack physical mounting provisions.



ArcTiv Solution:

iPDU's are available in 0U & 1U configurations and seamlessly fit in ArcTiv Server Racks and Edge-Series Cabinets.



1U iPDU Mounting



Tool-Less Mounting Button

L-Shaped Mounting Bracket

Tool-less 0U iPDU Mounting

Greater Organization

IDENTIFY, SECURE AND MANAGE POWER CABLES

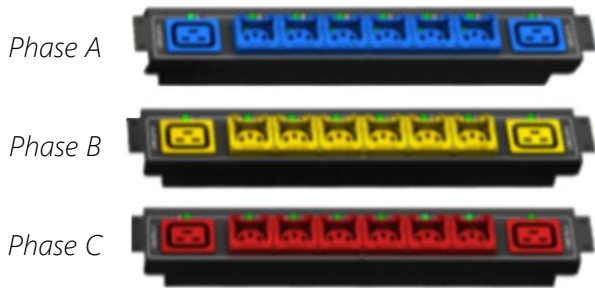
Color Configurable

Challenge: When servicing equipment, operators need to identify the correct power cables and to manage 3 phase and branch load balancing.



ArcTiv Solution:

Colored chassis and outlet modules to identify A & B feeds and phases, allowing fast servicing and visual load balancing.



Colored Outlet Modules by Phase



Colored Outlet Modules, by A & B Feeds

Locking C13 Outlets

Challenge: Unlocked power cables may accidentally unplug during rack maintenance or improper installation. Users often need to purchase separate locking cables.



ArcTiv Solution:

Built-in C13 plug retention to secure power cables, reducing accidental outages and avoid expensive locking cables.



0U iPDU Modules with Locking C13 Outlets



1U iPDU with Locking C13 Outlets

Peace of Mind

FIELD REPLACE OR UPGRADE MODULAR COMPONENTS



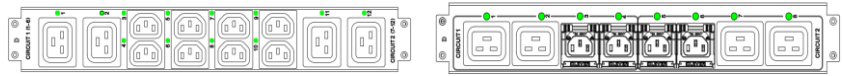
Hot-Swap Network Module for Generation Upgrade

Modular Design

Challenge: As IT equipment changes during the rack lifespan, outlet configurations need to be adjusted. Traditional PDU's need to be replaced to support the new load requirements.



ArcTiv Solution: Network and outlet modules are hot-swap field replaceable and upgradeable to adjust to changing IT equipment.



8×C13 + 4×C19

4×C13 + 4×C19



6×C13 + 2×C19

7×C13 + 1×C19

Hot-Swap Outlet Modules are Field Replaceable

2 Year Warranty

Challenge: If PDU outlets or network modules fail, a full PDU replacement may be needed, requiring network downtime or stocked PDU's for fast turnaround.



ArcTiv Solution: Modular components can be stocked or air-freighted¹ for field replaced without removing power to the network.

¹Warranty excludes shipping and handling fees



100% Factory Testing and Burn-In



Power Management

MONITOR AND CONTROL ADVANCED IT EQUIPMENT

Outlet Level Control



Challenge: IT Managers need to reboot devices across multiple PDU's. They also need to turn-off unused outlets to prevent improper access resulting in unbalanced loads.

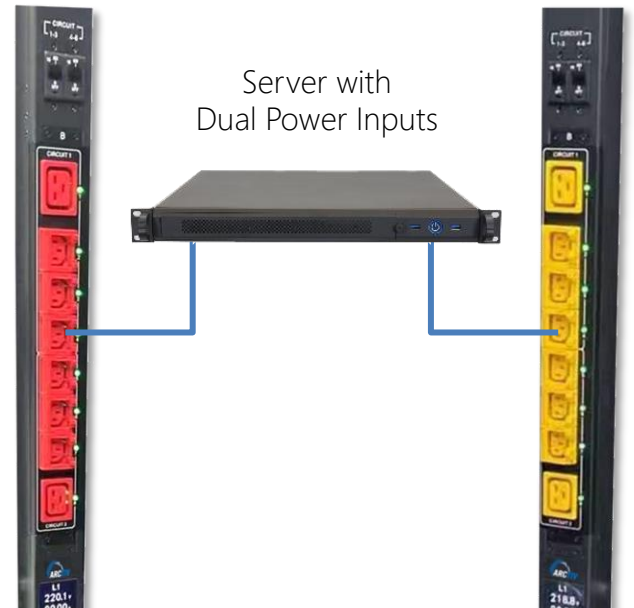
ArcTiv Solution:

Reboot devices with group-level switching, manage outlet access rights per user, and send over-current alerts by outlet.



No.	Outlet name	Group1	Group2	Group3	Group4	Group5	Group6	Group7	Group8
1	Outlet1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Outlet2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Outlet3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Outlet4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Outlet5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Outlet6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Outlet7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Outlet8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Outlet9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Outlet10	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Outlet11	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Outlet12	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Scheduled Switching of Individual & Group Outlets
- System Restart with Last Known State
- Outlet Voltage & Current Threshold Settings
- Administrator Defined Access Rights per Outlet



Server with Dual Power Inputs

Synchronized A & B Feeds for Device Reboot via Switched Outlets

High Density Outlets

Challenge: Data centers are increasing rack load capacity and outlet densities to support next-generations servers, exceeding the ratings of traditional PDU's.

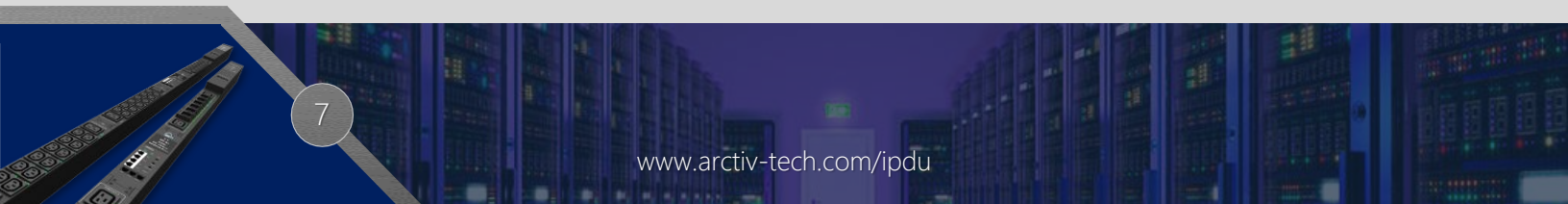


ArcTiv Solution:

iPDU's are available with up to 42 outlets in metered and managed models to support high-density rack equipment.



42 Outlet Managed Models Available



Environmental Management

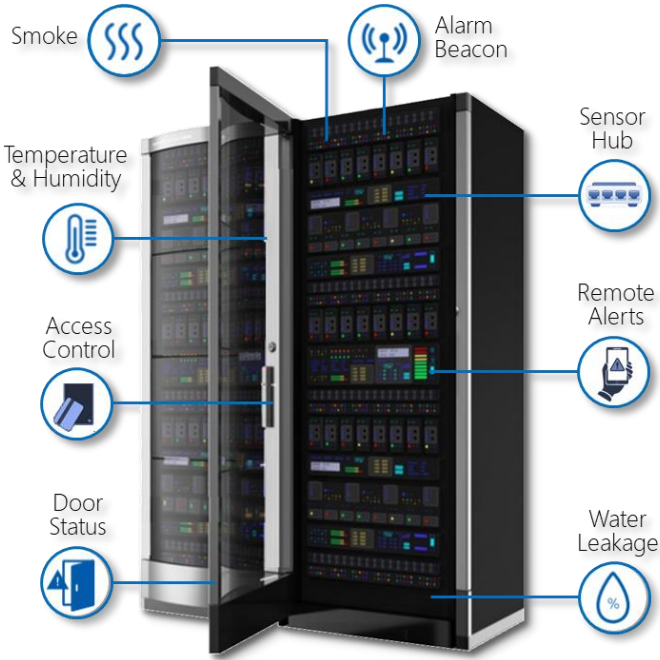
REMOTE AND ON-SITE MONITORING OF SENSORS & ALARMS



Rack Environment Sensors

Challenge: IT managers need to remotely monitor and manage rack security and environment while minimizing the number of IP addresses for IoT devices.

ArcTiv Solution: iPDU's support rack access control and environmental sensors, accessible through a common networking device.



Rack Environmental Sensors



Access Control via E-Handle with RFID & Key Lock



Hub for Rack Sensor Integration

2.8" LCD Display

Challenge: Data center operators conduct frequent walk-throughs to monitor the PDU status. Small screens can be difficult to read through the vented rack doors, requiring opening each door for a system check.



ArcTiv Solution: Easy to read iPDU screen and alarms without opening the rack doors, saving time during aisle walk-throughs.

L1	L2	L3	T1	25°C
220.0 v	220.0 v	220.0 v	T2	34°C
00.00 A	00.00 A	00.00 A	H1	45 %
00.000 kW	00.000 kW	00.000 kW	H2	44 %
000000.0 kWh	000000.0 kWh	000000.0 kWh		

On-Screen Monitoring Functions



High Resolution 2.8" FTF Color LCD



Data Center Optimization

LOWER TOTAL INVESTMENT COSTS & MINIMIZE PUE

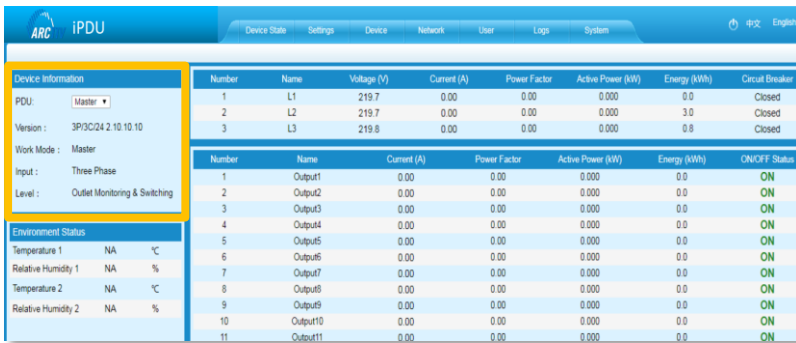
Daisy Chain

Challenge: Data centers need to invest in networking and cabling costs while managing 100's of PDU IP addresses and creating complex firmware version controls.



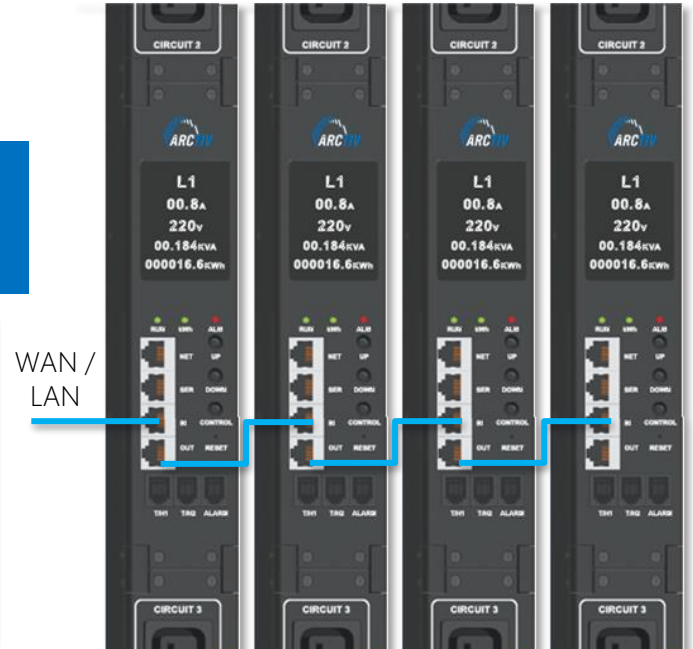
ArcTiv Solution:

Manage multiple iPDU's from a single IP address, reducing networking costs and simplifying firmware updates.



Remote Web Portal Manages Multiple iPDU's

Master iPDU Link iPDU #1 Link iPDU #2 Link iPDU #3



Daisy Chain 4 iPDU's Under 1 IP Address



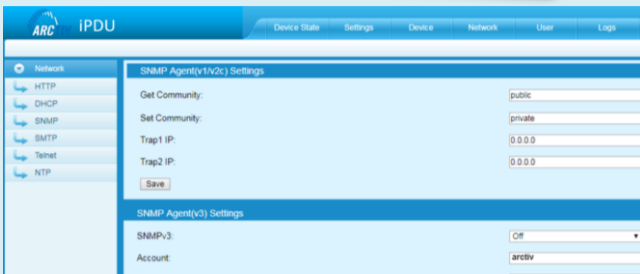
1% Accuracy

Challenge: Data centers need to measure rack power consumption and thermal ratings to balance loads, lower PUE and optimize cooling performance.

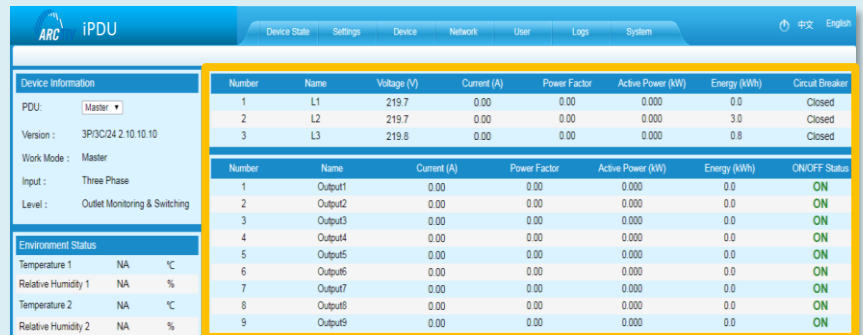


ArcTiv Solution:

iPDU's accurately measure power consumption by phase and outlet and integrate with DCIM's to optimize PUE.



DCIM Integration via SNMP v1, v2, v3, Modbus, Telnet, SMTP, DHCP, NTP



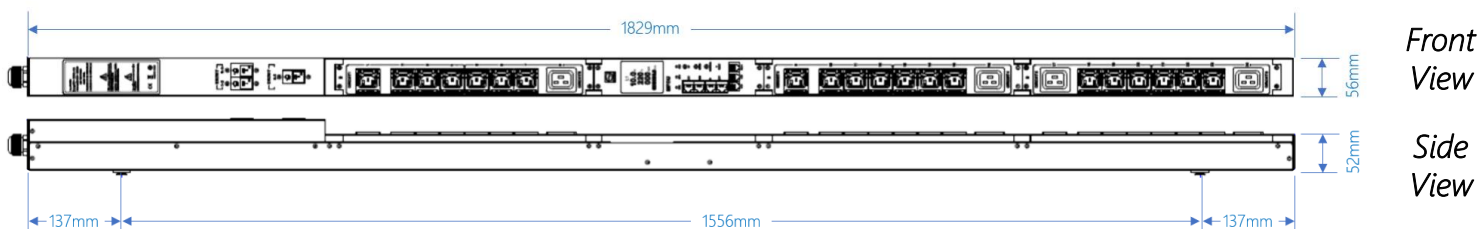
Monitor iPDU by Phase and Outlets with ±1% Accuracy

iPDU Specifications

STANDARD MODELS

FUNCTION		METERED INPUT	METERED OUTLET	MANAGED
Input	Rated Voltage	1P: 100VAC – 240VAC (50/60 Hz), 3P: 200VAC – 415VAC (50/60 Hz)		
	Plug Types	IEC60309 1P (16A, 32A, 63A), IEC60309 3P (16A, 32A)		
	Cable Length	3 Meters		
	Protection	2 x 1-pole, 16A hydraulic-magnetic circuit breakers (temperature stable)		
Output	Outlet Types	C13 (10A, Locking & Non-Locking), C19 (16A, Non-Locking)		
	Rated Voltage	1P: 100VAC – 240VAC (50/60 Hz)		
	Outlet Quantity	1U: 8 0U (Standard): 24 (High-Density): 36 / 42		
Metering	Input Power	Current, Voltage, Power (kW, kVAR, kVA, by Phase), PF, Circuit Breaker, 1% Accuracy		
	Output Power	-	Outlet Voltage, Current, 1% Accuracy	
	Environment	Sensor Hub, Temp / Humid (x2), Water Leak, Door Sensors, Alarm Beacon, e-Handle		
	Daisy Chain	Master (1), Slave (3)		
Control	Output	-	-	Individual Outlet Control
	Restart	-	-	Last-Known State
	Device Reboot	-	-	Schedule Group Outlets
Alarms	Thresholds	Voltage (High / Low), Input Current (Overload), Environmental Sensors		
	Method	LCD Display (Screen/Buzzer), Web Interface, Email, SNMP Trap		
	Logs	Voltage, Current, Temperature, Humidity, Sensors & Door Status		
Networking	Remote Access	Web Based (Browser), Multi-User Permission Settings		
	Displays	2.8" LCD Screen, 3 x LED's (Power On, Power Pulse, Alarm)		
	Communication	SNMP (V1,V2c,V3) , Http/Https, Telnet, Modbus-RTU, TFTP, SMTP		
	Connectivity Speed	100Mbps		
	Sensors	Temperature (0-45°C ±1°C), Humidity (10 – 90°C, ±5%), Response: 400ms		
	Firmware	Supports Remote and Local Upgrade		
Physical	Ports	Net (RJ45), Daisy Chain (2 x RJ45), Serial (RJ45), Temp/Humid (2 x RJ11), Alarm (RJ11)		
	Colors	Chassis & Outlet Modules: Black, Red, Blue, Orange, Yellow		
	Dimensions	0U: 1829 x 56 x 52mm (Standard ² , 24 Outlets), 1U: 486 x 216 x 44.4mm		
Environment	Weight	0U: 10kg (Standard ² , 24 Outlets), 1U: 5.5kg		
	Operating	Temp: 0 – 45°C, Humidity: 5 to 95%, Altitude: 0 – 3,000m		
Safety	Storage	Temp: -20 – 70°C, Humidity: 5 to 95%, Altitude: 0 – 15,000m		
	Certifications	CE, RoHS, EMC (EN), LVD (IEC), REACH		
	Warranty	2-year Repair or Replace		

0U iPDU Dimensions (Standard Models, 24 Outlets)



Notes: ²Refer to product data sheets for high-density 0U models (>24 outlets)
 Specifications shown are subject to change without any further notification.

Ordering Information

iPDU MODELS AND ACCESSORIES

iPDU Models

TYPE	PHASE	TOTAL CURRENT	CIRCUIT BREAKERS	DENSITY	OUTLETS		METERED INPUT	METERED OUTLET	MANAGED	
					C13	C19				
1U	1	16A	-	-	8	-	ATIPDUMIH180	ATIPDUMOH180	ATIPDUMAH180	
0U	1	16A	-	Standard (24)	18	6	ATIPDUMI11-1806	ATIPDUMO11-1806	ATIPDUMA11-1806	
					20	4	ATIPDUMI11-2004	ATIPDUMO11-2004	ATIPDUMA11-2004	
					21	3	ATIPDUMI11-2103	ATIPDUMO11-2103	ATIPDUMA11-2103	
					36	6	ATIPDUMI11-3606	-	-	
					18	6	ATIPDUMI13-1806	ATIPDUMO13-1806	ATIPDUMA13-1806	
					20	4	ATIPDUMI13-2004	ATIPDUMO13-2004	ATIPDUMA13-2004	
		32A	2 x 16A	-	Standard (24)	21	3	ATIPDUMI13-2103	ATIPDUMO13-2103	ATIPDUMA13-2103
						24	12	ATIPDUMI13-2412	ATIPDUMO13-2412	ATIPDUMA13-2412
						36	6	ATIPDUMI13-3606	ATIPDUMO13-3606	ATIPDUMA13-3606
						18	6	ATIPDUMI16-1806	ATIPDUMO16-1806	ATIPDUMA16-1806
						20	4	ATIPDUMI16-2004	ATIPDUMO16-2004	ATIPDUMA16-2004
						21	3	ATIPDUMI16-2103	ATIPDUMO16-2103	ATIPDUMA16-2103
	63A	4 x 16A	-	Standard (24)	24	12	ATIPDUMI16-2412	ATIPDUMO16-2412	ATIPDUMA16-2412	
					36	6	ATIPDUMI16-3606	ATIPDUMO16-3606	ATIPDUMA16-3606	
					18	6	ATIPDUMI31-1806	ATIPDUMO31-1806	ATIPDUMA31-1806	
					20	4	ATIPDUMI31-2004	ATIPDUMO31-2004	ATIPDUMA31-2004	
					21	3	ATIPDUMI31-2103	ATIPDUMO31-2103	ATIPDUMA31-2103	
					24	12	ATIPDUMI31-2412	ATIPDUMO31-2412	ATIPDUMA31-2412	
	3	16A	-	Standard (24)	24	12	ATIPDUMI31-2412	ATIPDUMO31-2412	ATIPDUMA31-2412	
					36	6	ATIPDUMI31-3606	ATIPDUMO31-3606	ATIPDUMA31-3606	
					18	6	ATIPDUMI33-1806	ATIPDUMO33-1806	ATIPDUMA33-1806	
					20	4	ATIPDUMI33-2004	ATIPDUMO33-2004	ATIPDUMA33-2004	
					21	3	ATIPDUMI33-2103	ATIPDUMO33-2103	ATIPDUMA33-2103	
					24	12	ATIPDUMI33-2412	ATIPDUMO33-2412	ATIPDUMA33-2412	
32A		6 x 16A	-	Standard (24)	36	6	ATIPDUMI33-3606	ATIPDUMO33-3606	ATIPDUMA33-3606	
					18	6	ATIPDUMI33-1806	ATIPDUMO33-1806	ATIPDUMA33-1806	
					20	4	ATIPDUMI33-2004	ATIPDUMO33-2004	ATIPDUMA33-2004	
					21	3	ATIPDUMI33-2103	ATIPDUMO33-2103	ATIPDUMA33-2103	
					24	12	ATIPDUMI33-2412	ATIPDUMO33-2412	ATIPDUMA33-2412	
					36	6	ATIPDUMI33-3606	ATIPDUMO33-3606	ATIPDUMA33-3606	

iPDU's Include

- 2 x Network Cables, 2M
- 1 x Serial Cable, 2M
- Mounting Brackets
- Quick Start Guide
- User Manual (QR Code)
- Carton Packaging

Customized Options

- Chassis & Outlet Colors
- Locking C13 Outlets
- Outlet Modules
- Power Cables

iPDU Sensors & Accessories

ITEM	MODEL
SENSOR HUB	ATIPDUSENSOR
DOOR CONTACT	ATIPDUCONTACT
SMOKE SENSOR	ATIPDUSMOKE
WATER SENSOR	ATIPDUWATER
TEMP/HUMID SENSOR	ATIPDUTEMP
ALARM BEACON	ATIPDUALARM
E-HANDLE	DS899



Power



Protect



Cool



Connect

ArcTiv Technologies is a global technology vendor whose mission is to **Power, Protect, Cool and Connect** your data center and edge-computing network infrastructure.

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