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# **Upgradeable PDU**



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Geist Upgradeable power strips give data center managers the flexibility to install the intelligence they require today with the option to upgrade technology as needs evolve. From basic power to sophisticated power monitoring with remote sensors, the Geist Upgradeable product line adapts to your business well into the future.

# Features & Benefits

**Upgradeable Monitoring** – Install the technology you need today with the ability to upgrade as your needs evolve.

**Hot-Swappable Units** – Add, remove or switch Interchangeable Monitoring Devices (IMD) without interrupting power to critical servers.

**High Temperature Grade** – 60°C working ambient variants for high temperature environments.

**Remote Sensor Port** – Monitor environmental conditions such as temperature, airflow, humidity and dew point with the use of a Geist remote sensors.

Input Power Monitoring 1% Accuracy (ANSI and IEC standards) – Allows data center managers to accurately reconcile power usage.

**Fault-Tolerant Daisy Chaining** – Simplifies intelligent PDU connectivity and ensures data is reported even with a break in the chain.

**Low-Profile Breakers** – Compact profile to install in tight spaces for units requiring breakers.

**Red LED Rotatable Display** – Read power data easily in dimly lit areas.

Available With or Without U-Lock Receptacles – Designed for simplicity, the patented U-Lock technology will naturally capture and securely lock cords in place. Each receptacle is color injected directly, to assure load balancing is easily achieved.



# **Upgrade Path**

There is a clear route to upgraded functionality for Geist PDUs. However, it is not necessary to start at the most basic level. Simply choose the functionality that suits your requirements today and even if that is at our current most sophisticated level, our future solutions approach will allow you to upgrade at a later date.







## **Future Upgrades**

We are always looking to add functionality as technology advances, allowing you to make more of our product in the future. That means you can stay at the very peak of performance when it comes to our upgradeable power products.

# IMD – Power Monitoring and Remote Sensor

The latest Interchangeable Monitoring Device allows remote power monitoring and also adds the ability to connect up to four remote sensors - ideal for installations requiring environmental monitoring.

Pages 03 - 06

## **IMD – Power Monitoring**

A PDU that offers power monitoring: the perfect first step towards PDU increased functionality.

Pages 07 - 10

## **Basic**

Should your facility not be ready for any power monitoring, but it is on the future development plan, then you can start with the basic upgradeable unit. No IMD is included with the device, but the technology is included within the power strip.

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Interchangeable Monitoring Device (IMD)

# Upgradeable Local and Remote Power Monitoring + Remote Sensing

#### Part Number: IMD-02EV - Vertical IMD-02EH - Horizontal

#### Description

The IMD-02EV Interchangeable Monitoring Device + Remote Sensing delivers a comprehensive view of power usage and environmental conditions in a data center. To be used with the modular design of the Upgradeable PDU, it is a hot-swappable replacement or upgrade solution allowing new technology to be applied as it is developed.

The IMD-02EV, offers on-board and web power monitoring display options with quick access to the unit's current, volts, real power, apparent power, power factor and kilowatt hours. By monitoring these critical variables, data center managers can evaluate energy usage trends and ensure maximum uptime. The unit's environmental sensor port also gives data center managers the ability to track critical climate variables like temperature, air flow, humidity and dew point with the use of a Geist remote sensor. Racknet Enabled — The IMD-02EV easily integrates with Racknet — Geist's DCIM software. Racknet (purchased separately) collects and reports critical power and environmental data for multiple PDUs in one, user configurable interface. Users gain immediate remote access to trends, alarms and histories of devices in the data center through a standard Web browser. Racknet saves both time and cost associated with managing each device individually. Contact your Geist rep for more details.

#### **Product Summary**

Interchangeable Monitoring Device, Power Monitoring + Remote Sensing, Phase (X, Y, Z) Monitoring (A, V, W, VA, kWh, PF) Phase Power Measurements Compliant with ANSI C12.1 and IEC 62053-21 at 1% Accuracy Class Requirements, Circuit/Breaker Monitoring (A), Circuit/Breaker Current Measurements Independently Tested and Verified at 2% Accuracy.





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# Upgradeable Local and Remote Power Monitoring + Remote Sensing



Key	Part Number	Amps	Volts	kW	Plug Style	Receptacle Type and Count	Network Port	Remote Sensor Port	Toolless Mounting	Chassis Dimen- sion
A	120045	20A	120V	1.9kW	5-20P	24 x NEMA 5-20R	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	66.25in x 2in x 2in
В	120046	30A	120V	2.8kW	L5-30P	24 x NEMA 5-20R	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	66.25in x 2in x 2in
С	120047L	30A	208V	4.9kW	L6-30P	30 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2in x 2in
D	120050L	20A	120/208V	5.7kW	L21-20P	36 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2in x 2in
E	I20051L	30A	120/208V	8.6kW	L21-30P	24 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2in x 2in
F	120052L	30A	208V	8.6kW	L15-30P	24 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2in x 2in
G	120062L	50A	208V	14.4kW	3P+E CA	12 x locking C13 / 12 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2.25in x3.44in
Н	120058L	60A	208V	17.2kW	3P+E (IP44)	12 x locking C13 / 12 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2.25in x3.44in
I	120071L	60A	208V	9.9kW	2P+E (IP44)	18 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	Yes	61.25in and 64.75in	72in x 2.25in x3.44in

Additional configurations available. See them all at geistglobal.com/upgradeablePDU.



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5YEAR WARRANTY

**POWER** Upgradeable



Interchangeable Monitoring Device (IMD)

# Upgradeable Local and Remote Power Monitoring

Part Number:	IMD-02XV - Vertical
	IMD-02XH - Horizontal

#### Description

The IMD-02XV Interchangeable Monitoring Device delivers a comprehensive view of power usage in a data center. To be used with the modular design of the Upgradeable PDU, it is a hot-swappable replacement or upgrade solution allowing new technology to be applied as it is developed.

The IMD-02XV, offers on-board and web power monitoring display options with quick access to the unit's current, volts, real power, apparent power, power factor and kilowatt hours. By monitoring these critical variables, data center managers can evaluate energy usage trends and ensure maximum uptime.

Racknet Enabled — The IMD-02XV easily integrates with Racknet — Geist's DCIM software. Racknet (purchased separately) collects and reports critical power and environmental data for multiple PDUs in one, user configurable interface. Users gain immediate remote access to trends, alarms and histories of devices in the data center through a standard Web browser. Racknet saves both time and cost associated with managing each device individually. Contact your Geist rep for more details.

#### **Product Summary**

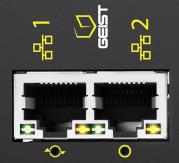
Interchangeable Monitoring Device, Power Monitoring, Phase (X, Y, Z) Monitoring (A, V, W, VA, kWh, PF) Phase Power Measurements Compliant with ANSI C12.1 and IEC 62053-21 at 1% Accuracy Class Requirements, Circuit/ Breaker Monitoring (A), Circuit/Breaker Current Measurements Independently Tested and Verified at 2% Accuracy.



# MD-02X UPGRADE READY

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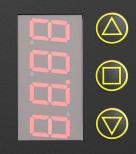
Find out more at: geistglobal.com/upgradeablePDU

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# Upgradeable Local and Remote Power Monitoring



Key	Part Number	Amps	Volts	kW	Plug Style	Receptacle Type and Count	Network Port	Toolless Mounting	Chassis Dimension
A	120001	20A	120V	1.9kW	5-20P	24 x NEMA 5-20R	Dual 10/100Mbps Ethernet	61.25in and 64.75in	66.25in x 2in x 2in
В	120002	30A	120V	2.8kW	L5-30P	24 x NEMA 5-20R	Dual 10/100Mbps Ethernet	61.25in and 64.75in	66.25in x 2in x 2in
С	120003L	30A	208V	4.9kW	L6-30P	30 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in
D	120006L	20A	120/208V	5.7kW	L21-20P	36 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in
E	120007L	30A	120/208V	8.6kW	L21-30P	24 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in
F	120008L	30A	208V	8.6kW	L15-30P	24 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	61.25in and 64.75in
G	120021L	50A	208V	14.4kW	3P+E CA	12 x locking C13 / 12 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in
н	I20017L	60A	208V	17.2kW	3P+E (IP44)	12 x locking C13 / 12 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in
I	120030L	60A	208V	9.9kW	2P+E (IP44)	18 x locking C13 / 6 x locking C19	Dual 10/100Mbps Ethernet	61.25in and 64.75in	72in x 2in x 2in

Additional configurations available. See them all at geistglobal.com/upgradeablePDU.



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5YEAR WARRANTY





# **Basic - Blanking Panels**



Key	Part Number	Amps	Volts	kW	Plug Style	Receptacle Type and Count	Network Port	Toolless Mounting	Chassis Dimension
Α	110001	20A	120V	1.9kW	5-20P	24 x NEMA 5-20R	Ν	61.25in and 64.75in	66.25in x 2in x 2in
В	110002	30A	120V	2.8kW	L5-30P	24 x NEMA 5-20R	N	61.25in and 64.75in	66.25in x 2in x 2in
с	110003L	30A	208V	4.9kW	L6-30P	30 x locking C13 / 6 x locking C19	N	61.25in and 64.75in	72in x 2in x 2in
D	110006L	20A	120/208V	5.7kW	L21-20P	36 x locking C13 / 6 x locking C19	Ν	61.25in and 64.75in	72in x 2in x 2in
E	I10007L	30A	120/208V	8.6kW	L21-30P	24 x locking C13 / 6 x locking C19	Ν	61.25in and 64.75in	72in x 2in x 2in
F	110008L	30A	208V	8.6kW	L15-30P	24 x locking C13 / 6 x locking C19	Ν	61.25in and 64.75in	72in x 2in x 2in
G	I10015L	50A	208V	14.4kW	3P+E CA	12 x locking C13 / 12 x locking C19	Ν	61.25in and 64.75in	72in x 2in x 2in
н	I10016L	60A	208V	17.2kW	3P+E (IP44)	12 x locking C13 / 12 x locking C19	N	61.25in and 64.75in	72in x 2in x 2in
I	110028L	60A	208V	9.9kW	2P+E (IP44)	18 x locking C13 / 6 x locking C19	Ν	61.25in and 64.75in	72in x 2in x 2in

Additional configurations available. See them all at geistglobal.com/upgradeablePDU.



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**POWER** Upgradeable

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5YEAR WARRANTY

# Inline Upgradeable Local and Remote Power Monitoring Upgradeable Inline Monitoring

Basic PDUs not equipped with power monitoring can be retrofit with Geist's Upgradable inline monitor. Simply insert the device between the PDU and the power source to measure and display data locally and remotely.

This is the ideal solution for facilities that do not want to replace their entire arsenal of non-intelligent PDUs, but want power monitoring capabilities.

Local current monitoring supplies instant feedback, ideal for equipment moves, adds and changes.

With remote current monitoring, data center managers can receive early notification of current threshold breach, preventing unnecessary downtime. Data from remote current monitoring can be accessed through any Web browser, and no external software is needed.

Data can also be integrated into Simple Network Management Protocol (SNMP) systems for remote notification, and the user-friendly graphical user interface (GUI) allows managers to quickly find pertinent information.

Key	Part Number	Amps	Volts	kW	Plug Style	Receptacle Type	Network Port	Remote Sensor Port	Toolless Mounting	Chassis Dimension		
Inline (	Inline Upgradeable Local and Remote Power Monitoring + Remote Sensing											
Α	UI20020	16A or 20A	100-240V	1.9-4kW	C20	Locking C19	Dual 10/100 Mbps Ethernet	Yes	14in	17in x 1.715in x 2.5in		
В	120106	20A	208V	3.3kW	6-20C & 6-20P	6-20R	Dual 10/100 Mbps Ethernet	Yes	14in	17in x 1.715in x 2.5in		
В	120107	20A	208V	3.3kW	L6-20C & L6-20P	L6-20R	Dual 10/100 Mbps Ethernet	Yes	14in	17in x 1.715in x 2.5in		
С	120108	30A	208V	4.9kW	L6-30P & L6-30P	L6-30R	Dual 10/100 Mbps Ethernet	Yes	14in	17in x 1.715in x 3.5in		
С	120109	30A	120/208V	8.6kW	L21-30C & L21-30P	L21-30R	Dual 10/100 Mbps Ethernet	Yes	14in	17in x 1.715in x 3.5in		
Inline (	Jpgradeable	Local and Ren	note Power M	lonitoring								
D	UI20019	16A or 20A	100-240V	1.9- 4kW	C20	Locking C19	Dual 10/100 Mbps Ethernet	No	14in	17in x 1.715in x 2.5in		
E	120102	20A	208V	3.3kW	6-20C & 6-20P	6-20R	Dual 10/100 Mbps Ethernet	No	14in	17in x 1.715in x 2.5in		
E	120103	20A	208V	3.3kW	L6-20C & L6-20P	L6-20R	Dual 10/100 Mbps Ethernet	No	14in	17in x 1.715in x 2.5in		
F	120104	30A	208V	4.9kW	L6-30P & L6-30P	L6-30R	Dual 10/100 Mbps Ethernet	No	14in	17in x 1.715in x 3.5in		
F	120105	30A	120 /208V	8.6kW	L21-30C & L21-30P	L21-30R	Dual 10/100 Mbps Ethernet	No	14in	17in x 1.715in x 3.5in		





Inline Upgradeable Local and Remote Power Monitoring + Remote Sensing



Inline Upgradeable Local and Remote Power Monitoring





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