



Tripp Lite Hospital-Grade Products

UPS Systems and Isolation Transformers

Tripp Lite Hospital-Group Products

Surge Suppressors and Power Distribution Strips

Protect and/or Provide Power to

- *Medical, Radiology, Laboratory and Laser Equipment*
- *Pharmaceutical Carts and Portable Point-of-Care Equipment*
- *Computer/Telecom Equipment*



UL-Listed Protection
and Support for
Healthcare Systems

UL 2601-1

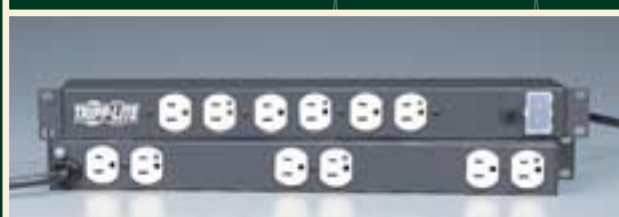
CSA 22.2 No. 601.1

UL 1778

UL 1012

UL 1363

UL 1449





*Tripp Lite provides
the most reliable
and cost-effective
solutions for protecting
healthcare capital
equipment.
Tripp Lite's superior
quality products,
unmatched customer
support and 80-year
service history have built
a trusted reputation for
reliability among
healthcare and network
managers and original
equipment manufacturers
worldwide.*



Tripp Lite: The Key to...

Maintaining Quality Care

Maximize Patient Safety

- Provides UL 2601-1 listed equipment
- Provides equipment with full isolation
- Includes hospital-grade plugs and receptacles

Maximize Patient Service

- Keeps healthcare systems running through power problems
- Helps maintain uninterrupted patient service
- Safeguards invaluable patient data from loss or corruption

Improve Economic Efficiency

- Reduces need for repeat procedures—critical in tight budgetary/compensatory environments
- Protects IT and healthcare equipment from costly damage

Index Select the perfect Tripp Lite solution for your specific area of application.

MEDICAL-GRADE PRODUCTS

Point-of-Care, Telemedicine,
Radiology, ICU, Examining
Rooms, Mobile Carts

UL 2601-1/Full Isolation

*UPS Systems &
Isolation Transformers*

Pages 4 – 5

HOSPITAL-GRADE & HOSPITAL-GROUP PRODUCTS

Nurses' Stations, Wireless
Communication, Electronic
Prescribing, Medical Imaging
(PAC), Laboratories

Hospital-Grade

UPS Systems

Hospital-Group

Surge Suppressors & Power Distribution Strips

Pages 6 – 7

TRUE ON-LINE UPS SYSTEMS

Radiology/Medical Imaging (PAC), Laboratories, HIPPA/Security,
Information/Network, Bio-Medical/Clinical Engineering,
Records/Archiving/Claims

SmartOnline™

UPS Systems

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LIFE SUPPORT STATEMENT

Tripp Lite does not recommend the use of any of its products in any life support applications in which a malfunction or failure of a Tripp Lite product could cause failure or significantly alter the performance of a life support device.

Power Problems are Common and Costly

“**120 damaging power problems** per month hit the average computer system.” *

“U.S. businesses lose **\$50 billion per year** due to blackouts.” **

*IBM study. **Electric Power Research Institute study.

Healthcare systems (from remote file servers to medical carts in patient-care areas) are only as reliable as the utility power that runs them. Unfortunately, due to electrical utility deregulation and the constant threat of lightning and other natural disasters, healthcare providers are forced to dispense higher quality care while dealing with lower quality utility power. Tripp Lite Power Protection keeps healthcare facilities well protected and productive through a variety of power problems.

Power Problem Effects	Power Problem Causes	Tripp Lite Healthcare Solutions
BLACKOUTS <ul style="list-style-type: none">• Interruption in patient service• Loss or corruption of active patient data• Information system downtime	<ul style="list-style-type: none">• Utility company failure• Locally tripped circuit breakers• Accidental AC line disconnection	<ul style="list-style-type: none">• UPS Systems Provide battery backup power to allow enough time to complete procedures and safely shut down systems
BROWNOUTS <ul style="list-style-type: none">• Interruption in patient service• Loss or corruption of active patient data• Slow electronic degradation	<ul style="list-style-type: none">• Inadequate electrical infrastructure within older facilities• Inadequate utility service (demand outstripping supply)• Increased usage within a facility from heavy-consumption electrical devices (air conditioning, printers, etc.)	<ul style="list-style-type: none">• UPS Systems Take the widest range of incoming voltage and automatically adjust it to nominal 120V AC power
SURGES <ul style="list-style-type: none">• System lockups and data errors• Interruption in patient service• Equipment damage from slight to catastrophic	<ul style="list-style-type: none">• Utility company load shifting• Miswired electrical service• Lightning strikes	<ul style="list-style-type: none">• UPS Systems• Isolation Transformers• Surge Suppressors Absorb and shunt damaging surges to safety ground
EMI/RFI LINE NOISE <ul style="list-style-type: none">• System lockups and data errors• Interruption in patient service• Audio/video signal distortion• Slow electronic degradation	<ul style="list-style-type: none">• Radio transmissions• Fluorescent lighting• High voltage power lines• Motor-driven equipment and appliances	<ul style="list-style-type: none">• UPS Systems• Isolation Transformers• Surge Suppressors Filter distortion and provide stable waveforms

UPS Systems & Isolation Transformers



UL 2601-1 Listed FULL ISOLATION

- ▶ Hospital-Grade Plugs & Receptacles
- ▶ Resistant to ESD
(electrostatic discharge)

Application:

HEALTHCARE EQUIPMENT AND COMPUTERS

Within and Outside of Patient-Care Areas

Maximize Patient Safety

Tripp Lite Medical-Grade UPS Systems and Isolation Transformers are UL 2601-1 listed and provide the maximum level of power protection when used with equipment in patient-care areas. They both feature built-in, Faraday-shielded isolation transformers to reduce the cumulative leakage currents of all connected equipment below 300µA. Full isolation provides a superior level of safety and quality for your most critical medical applications: Point-of-Care, ICU, Telemedicine, Radiology and more. As a further safety measure, hospital-grade plugs and receptacles reduce the risk of accidental equipment disconnection.

Maximize Patient Service

By shielding healthcare equipment from damaging power problems, Tripp Lite

Medical-Grade UPS Systems and Isolation Transformers preserve invaluable patient data from loss or corruption. Secure data maximizes clinicians' confidence in procedural results and diagnoses, ultimately maximizing patient service and satisfaction.

Tripp Lite Medical-Grade UPS Systems provide the highest level of protection against power problems. All receptacles provide battery backup during blackouts, allowing patient service to continue uninterrupted. The UPS System will switch between utility power and battery backup power within 2-4 milliseconds—superior to generator power and well within computer industry fault tolerances. Tripp Lite UPS Systems' line-interactive operation—also known as automatic voltage regulation (AVR)—keeps equipment working through low voltage (brownouts) or high voltage* indefinitely, without draining battery power. All receptacles protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power line. A built-in transformer with full isolation provides the highest level of EMI/RFI and common-mode noise reduction, eliminating the need for costly dedicated utility circuits.

* High voltage correction not on OMNISMART350HG

Tripp Lite Medical-Grade Isolation

Transformers are designed to protect healthcare equipment that does not require battery backup support. All receptacles protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power line. A built-in transformer with full isolation provides the highest level of EMI/RFI and common-mode noise reduction, eliminating the need for costly dedicated utility circuits.

Improve Economic Efficiency

Tripp Lite Medical-Grade UPS Systems and Isolation Transformers reduce the need for costly and inconvenient repeat procedures when power problems threaten to destroy or distort patient data. This is especially important in today's climate of tight budgetary controls and reductions in HMO/insurance/government reimbursements.

Tripp Lite Medical-Grade products safeguard your equipment not only from single catastrophic events such as power surges, but also slow, cumulative electronic degradation. With Tripp Lite Medical-Grade products, you can lengthen the service life of connected equipment and reduce costly repairs.

A W A R D - W I N N I N G T R I P P L I T E R E L I A B I L I T Y



"Tripp Lite power protection integrated seamlessly with our equipment, ensuring 100% availability."
Quantech Ltd. (a point-of-care testing equipment manufacturer) John Innocenti, Senior Product Manager

A Hospital-Grade Plug & Receptacles



force of the receptacles are designed to reduce the risk of accidental disconnection.

Isolation Transformer with Faraday Shield (Internal)

All Medical-Grade UPS Systems and Isolation Transformers reduce the cumulative leakage currents of all connected equipment below 300µA. Full isolation provides a superior level of safety and quality for your most critical medical applications. Reduces common mode line noise, thereby reducing data errors and audio/video distortion.

Reliable Battery Backup (Internal)

All UPS Systems include internal batteries which supply constant 120V power through all AC receptacles to keep equipment in service through short blackouts and allow enough time to safely shut down during longer ones.

Automatic Voltage Regulation (Internal)

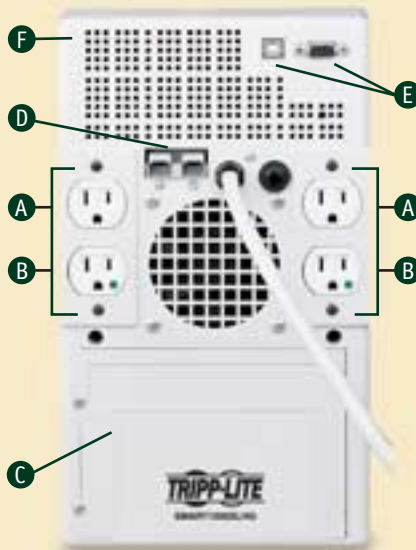
All UPS Systems keep equipment working through brownouts (low voltage) and high voltage* indefinitely. They automatically regulate incoming voltage to provide equipment with stabilized 120V power without draining battery power.

Diagnostic LEDs and Audible Alarm

All UPS Systems include front panel LEDs which alert you to up to 17 separate performance conditions, including battery charge, AC line voltage and more. An audible alarm alerts you to battery backup operation.

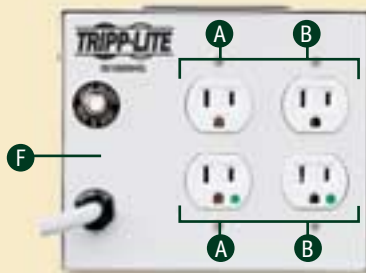
* High voltage correction not on OMNISMART350HG

UPS System—FULL ISOLATION 3 models available!



SMART1200XLHG Rear Panel

Isolation Transformer—FULL ISOLATION 4 models available!



IS1000HG Rear Panel

B Utility Power Line Surge Protection

Protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power (AC) line.

Modem/Fax Line Surge Protection



OMNISMART350HG models allow you to protect computers on up to two modem/fax lines simultaneously with surge-

protected RJ11 jacks.

C Convenient Battery Replacement

Access door saves the hassle of returning the UPS for internal battery replacement and service.

D Expandable Battery Capability



SMART1200XLHG models feature connectors which accept optional external battery packs to provide mission-critical equipment with additional runtime.

E Communication Ports and PowerAlert Software

Built-in communication port(s) work with PowerAlert Software,* allowing you to provide automatic unattended shutdown commands, remote rebooting and power quality monitoring on up to two servers.

F High-Impact Housing

Stands up to the most demanding environments. Isolation Transformers feature keyhole slots for fixed mounting.

* Available as a FREE download from www.tripplite.com/software.

Extend Runtime

During an extended blackout, your equipment requires extended battery runtime to stay in service. The SMART1200XLHG accepts external battery packs to provide all the additional runtime you need.

EXTENDED RUNTIME CHART	Load (VA/Watts)	Runtime (minutes) with included batteries	Runtime (minutes) with additional external battery packs				
			1	2	3	4	5
			SMART1200XLHG Extended Runtime with BP36V27 battery packs				
	250/175	81	382	687	993	1309	1621
	500/350	34	178	333	488	649	809
	800/560	22	100	194	290	389	487
	1000/700	16	81	155	240	316	393

Call Tripp Lite's Application Specialists at (773) 869-1234 for additional extended runtime solutions to fit your specific load requirements.

UPS Systems (Medical-Grade)—UL 2601-1/FULL ISOLATION: Reduce the cumulative leakage currents of all connected loads.

Model	Output Capacity (VA/Watts)	Input/Output Voltage (Frequency)	Backup Time (Minutes) Half/Full Load ^(A)	Hospital-Grade AC Receptacles ^(B)	Communication Ports	Modem/Fax Ports (RJ11)	Power Cord Length (ft) ^(C)	Dimensions H x W x D (in)	Leakage Current	Shipping Weight (lb)
SMART1200XLHG	1000/750	120V (60 Hz)	34/16+	4	1 (RS-232, DB9) & 1 (USB)	—	6	12.5 x 7.5 x 9	<300µA	47
SMART700HG	700/450	120V (60 Hz)	42/18	4	1 (RS-232, DB9) & 1 (USB)	—	6	12.5 x 7.5 x 9	<300µA	47
OMNISMART350HG	330/225	120V (60 Hz)	46/18	4	1 (RS-232, DB9)	2-line	6	10.75 x 5.25 x 7.25	<300µA	27
BP36V27	36V external battery pack and cables (for SMART1200XLHG only)							7 x 8.5 x 14.5	N/A	62

+ Backup times for SMART1200XLHG models can be extended with additional external battery packs (sold separately). ^(A) Typical backup times will vary depending on battery condition and load. ^(B) NEMA 5-15R HG receptacles.

^(C) With NEMA 5-15P HG plug.

Isolation Transformers (Medical-Grade)—UL 2601-1/FULL ISOLATION: Reduce the cumulative leakage currents of all connected loads.

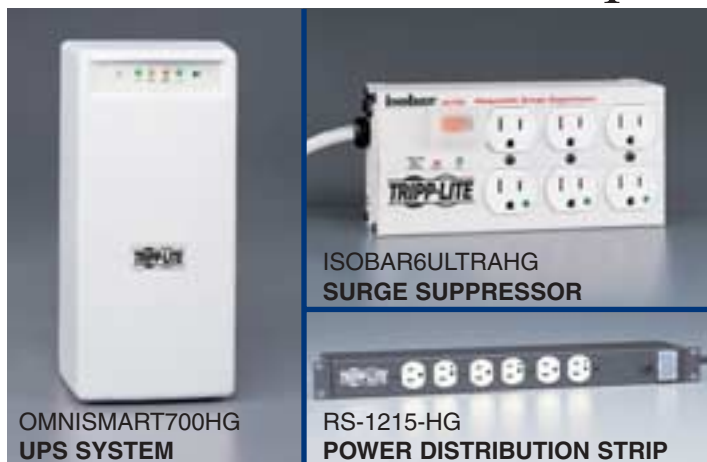
Model	Output Capacity (Watts)	Input/Output Voltage (Frequency)	Hospital-Grade AC Receptacles ^(A)	Power Cord Length (ft) ^(B)	Dimensions H x W x D (in)	Leakage Current	Shipping Weight (lb)
IS1800HG	1800	120V (60 Hz)	6	6	7.75 x 8.25 x 12.25	<300µA	59
IS1000HG	1000	120V (60 Hz)	4	6	7.25 x 7.25 x 10.5	<300µA	38
IS500HG	500	120V (60 Hz)	4	6	5.63 x 6.25 x 9.25	<300µA	24
IS250HG	250	120V (60 Hz)	2	6	4.5 x 4.75 x 7.75	<300µA	14

^(A) IS1800HG includes NEMA 5-15/20R HG receptacles. All other models include NEMA 5-15/20R receptacles. ^(B) IS1800HG's power cord includes a NEMA 5-20P HG plug; an optional NEMA 5-15P HG plug is included in the box.

All other models include a NEMA 5-15P HG plug. The policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice.

Detailed specifications available: www.tripplite.com

UPS Systems, Surge Suppressors & Power Distribution Strips



OMNISMART700HG
UPS SYSTEM

ISOBAR6ULTRAHG
SURGE SUPPRESSOR

RS-1215-HG
POWER DISTRIBUTION STRIP

HOSPITAL-GRADE

UPS Systems

HOSPITAL-GROUP

Surge Suppressors & Power Distribution Strips

- ▶ Hospital-Grade Plugs & Receptacles
- ▶ Resistant to ESD (electrostatic discharge)*

* Except power distribution strips.

Application:

COMPUTERS AND HEALTHCARE EQUIPMENT

Outside of Patient-Care Areas

Maximize Patient Data Security

By shielding healthcare equipment from damaging power problems, Tripp Lite Hospital-Grade UPS Systems and Hospital-Group Surge Suppressors preserve invaluable patient data from loss or corruption. Secure data maximizes clinicians' confidence in procedural results and diagnoses, ultimately maximizing patient service and satisfaction.

Tripp Lite Hospital-Grade and Hospital-Group products are designed to produce extremely low leakage current to ground and are for use outside of patient-care areas. As a further safety measure, hospital-grade plugs and receptacles reduce the risk of accidental equipment disconnection.

Tripp Lite Hospital-Grade UPS Systems

provide the highest level of protection against power problems. All receptacles provide battery backup during blackouts, allowing patient service to continue uninterrupted. The UPS System will switch between utility power and battery backup power within 2-4 milliseconds—superior to generator power and well within computer industry fault tolerances. Tripp Lite UPS Systems' line-interactive operation—also known as automatic voltage regulation (AVR)—keeps equipment working through low voltage (brownouts) or high voltage indefinitely, without draining battery power. All receptacles protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power line.

Tripp Lite Hospital-Group Surge

Suppressors are designed for healthcare equipment that does not require battery backup support, yet still requires adequate protection against power problems. All receptacles protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power line.

Tripp Lite Hospital-Group Power

Distribution Strips are designed for healthcare equipment that does not require surge suppression or line noise filtering. They simply provide a convenient source of AC receptacles that mount in rack enclosures, along cubicle or laboratory walls, tables and more.

Improve Economic Efficiency

Tripp Lite Hospital-Grade UPS Systems and Hospital-Group Surge Suppressors reduce the need for costly and inconvenient repeat procedures when power problems threaten to destroy or distort patient data. This is especially important in today's current climate of tight budgetary controls and reductions in HMO/insurance/government reimbursements.

Tripp Lite Hospital-Grade UPS Systems and Hospital-Group Surge Suppressors safeguard equipment against catastrophic and cumulative damage, lengthening equipment service life and speeding your payback period.

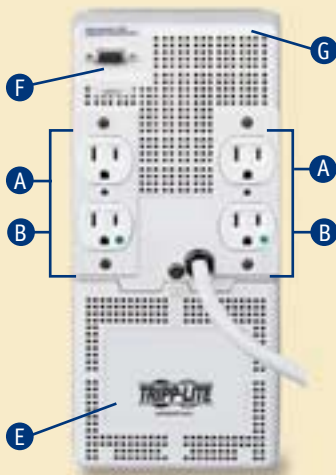
A W A R D - W I N N I N G T R I P P L I T E R E L I A B I L I T Y



"I can't say enough good things about Tripp Lite UPS Systems."

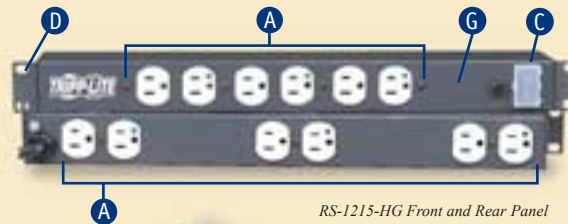
Ameritech Small Business Division Dan Erhart, Account Executive

UPS System—UL 1778 2 models available!

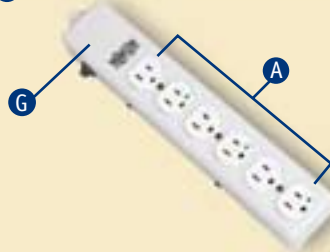


OMNISMART700HG Rear Panel

Power Distribution Strips— 2 models available!

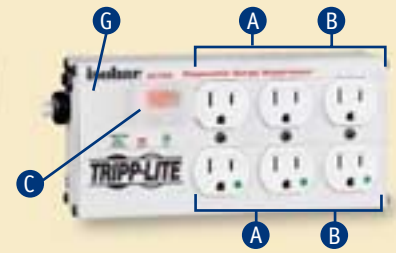


RS-1215-HG Front and Rear Panel



PS-615-HG

Surge Suppressor— 2 models available!



ISOBAR6ULTRAHG

A Hospital-Grade Plug & Receptacles



All models feature high impact resistant thermoplastic hospital-grade plugs and receptacles. The superior quality of the plugs' blades and higher retention force of the

receptacles are designed to reduce the risk of accidental disconnection.

B Utility Power Line Surge Protection

Protect equipment against damaging surges and disruptive EMI/RFI line noise on the utility power (AC) line.

Diagnostic LEDs & Audible Alarm (UPS Systems)

All UPS Systems include front panel LEDs which alert you to a variety of performance conditions, including battery charge, voltage regulation and more. An audible alarm alerts you to battery backup operation.

Diagnostic LEDs (Surge Suppressors)

Confirm adequate surge protection and grounded wall outlet.

C Illuminated On/Off Switch with Locking Safety Cover



Reduces the risk of accidental shutoff.

Reliable Battery Backup (Internal)

All UPS Systems include internal batteries which supply constant 120V power through all AC receptacles to keep equipment in service through short blackouts and allow enough time to safely shut down during longer ones.

Automatic Voltage Regulation (Internal)

All UPS Systems keep equipment working through brownouts (low voltage) and high voltage indefinitely. They automatically regulate incoming voltage to provide equipment with constant 120V power without draining battery power.

D Removable Rackmount Hardware

Allows RS-1215-HG model to be mounted in rack enclosures, on walls, under counters and on a variety of other surfaces.

E Convenient Battery Replacement

Access door saves the hassle of returning the UPS for internal battery replacement and service.

F Communication Port and PowerAlert Software

Built-in communication port works with PowerAlert Software,* allowing you to provide automatic unattended shutdown commands and remote rebooting on multiple servers.

* Available as a FREE download from www.tripplite.com/software.

G High-Impact Housing

Stands up to the most demanding environments. Surge Suppressors and Power Distribution Strips feature keyhole slots for mounting.

UPS Systems (Hospital-Grade): Do not include built-in isolation transformers—LOW LEAKAGE

Model	Output Capacity (VA/Watts)	Input/Output Voltage (Frequency)	Backup Time (Minutes) Half/Full Load ^(A)	Hospital-Grade AC Receptacles ^(B)	Communication Ports (DB9)	Power Cord Length (ft) ^(C)	Dimensions L x W x D (in)	Leakage Current	Shipping Weight (lb)
OMNISMART700HG	700/425	120V (60 Hz)	22/9	4	1 (RS-232, DB9)	6	10.75 x 5.25 x 7.25	<300μA	22
OMNISMART450HG	450/280	120V (60 Hz)	17/5	4	1 (RS-232, DB9)	6	10.75 x 5.25 x 7.25	<300μA	23

^(A) Typical backup times will vary depending on battery condition and load. ^(B) NEMA 5-15R HG receptacles. ^(C) With NEMA 5-15P HG plug.

Surge Suppressors (Hospital-Group)

Model	Joules (Surge Suppression Rating)	Input/Output Voltage (Frequency)	Hospital-Grade AC Receptacles ^(A)	Power Cord Length (ft) ^(B)	Dimensions L x W x H (in)	Leakage Current	Shipping Weight (lb)
ISOBAR6ULTRAHG [†]	600	120V (60 Hz)	6	12	7 x 3.5 x 2.5	<250μA	4
SPS-615-HG	450	120V (60 Hz)	6	15	12.5 x 2.5 x 1.5	<250μA	3

^(A) NEMA 5-15R HG. ^(B) With NEMA 5-15P HG plug.

Power Distribution Strips (Hospital-Group)

Model	Case Length	Input/Output Voltage (Frequency)	Hospital-Grade AC Receptacles ^(A)	Power Cord Length (ft) ^(B)	Dimensions L x W x H (in)	Leakage Current	Shipping Weight (lb)
RS-1215-HG [†]	19 in. rackmount	120V (60 Hz)	12 (6 front/6 rear)	15	1.75 (1U) x 17.5 x 4 ^(C)	<100μA	6
PS-615-HG ^{††}	12.5 in.	120V (60 Hz)	6	15	12.5 x 2.5 x 1.5	<100μA	3

Note: Power Distribution Strips do not provide surge suppression or line noise filtering. ^(A) NEMA 5-15R HG. ^(B) With NEMA 5-15P HG plug. ^(C) RS-1215-HG is designed with mounting hardware to fit standard 19 inch racks. They occupy only 1U rack space. The policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice.

Detailed specifications available: www.tripplite.com

