



POLYTRON DEVICES

Global Power Supply Manufacturer



2018-2019 POWER SUPPLY SHOWCASE

We have your power supply needs covered with our broad range of new and proven **switching power supplies**, **DC-DC converters** and **linear power modules**.

With thousands of off-the-shelf models and custom designs, we produce every power supply to the highest quality and performance standards.

INDUSTRIAL, MEDICAL AND RAILWAY APPLICATIONS
Standard and Custom Power Solutions for 50 years

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OUR PRODUCTS

Polytron Devices designs, manufactures and distributes high-performance power supplies for a wide variety of applications, including:

- Medical
- Military
- Process Control
- Audio
- Scientific Research
- Energy
- Entertainment
- Industrial
- Telecommunications
- Railway and Transportation

All products are manufactured in an ISO 9001:2015-certified facility.

DC-DC CONVERTERS

Spanning a range of 0.5 to 200 watts, our comprehensive UL-recognized and CE-marked DC-DC converter lineup includes a huge variety of output types and packaging options.

AC-DC SWITCHING POWER SUPPLIES

Available up to 500 watts, our UL-recognized and CE-marked switching power supplies feature a universal input capability, large range of output options, PC card, DIN rail or chassis mounting and high-performance EMI input filter.

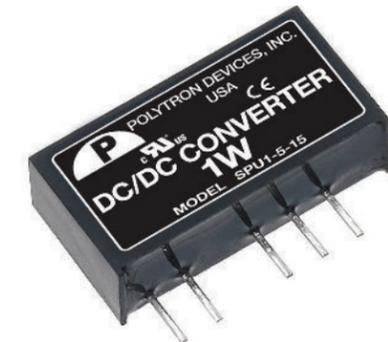
AC-DC LINEAR ENCAPSULATED POWER MODULES

Our UL- and CUL-recognized and CE-marked AC-DC linear encapsulated power modules are available from 5 to 250 Vdc output and feature a high isolation voltage option, short circuit protection, super low noise and single, dual or triple output voltages. Featuring PC or chassis mounts, they are available in industrial or medical versions.

- Industrial Applications
- 1 Watt Unregulated Output Power
- Miniature Single Inline Package (SIP): 0.77" × 0.24" × 0.40"
- 3000 VDC Input/Output Isolation
- Single and Dual Output
- High Efficiency (Up to 80%)
- Safety Meets: UL60950-1
- CE Marked

SPU1 SERIES

SINGLE AND DUAL OUTPUT,
SIP PACKAGE, 1 WATT



Housed in a miniature single inline package (SIP), this single and dual output DC-DC converter boasts 80 percent efficiency, 3,000 VDC input/output isolation and 1-watt unregulated output power.

- Industrial Applications
- 4:1 Wide Input Voltage Range
- 1600 VDC Input to Output Isolation
- Extra Low Noise: 10 mV p-p
- Remote Control
- Low Standby Power
- Over Current Protection
- Short Circuit Protection
- Under and Over Voltage Protection
- Six-Sided Continuous Shield
- Efficiency up to 89%
- Industry Standard DIP Package 1.25" × 0.80" × 0.40"
- Safety Approved UL60950-1, EN60950-1, IEC60950-1
- Built in EN55022 Class B Filter
- CE Marked
- Compliant to RoHS II and Reach

TLB5 SERIES

4:1 WIDE INPUT RANGE,
VERY LOW NOISE, 5 WATTS



These 5-watt DC-DC converters integrate a six-sided continuous shield and built-in EN55022 Class B filter. Units are housed in an industry-standard DIP package and meet all relevant UL safety standards.

SWB9 SERIES

4:1 WIDE INPUT RANGE, EXTRA SMALL PACKAGE, UP TO 9 WATTS



With a 4:1 ultra-wide input range, these DC-DC converters feature continuous short circuit protection, fixed switching frequency and external ON/OFF control. Choose from a plastic or metal case.

- Industrial Applications
- 4:1 Ultra Wide Input Range
- Output Current up to 2000 mA
- Miniature Single Inline Package (SIP): 0.86" x 0.36" x 0.44"
- Fixed Switching Frequency
- High Efficiency (up to 89%)
- Input/Output Isolation up to 1600 VDC
- Continuous Short Circuit Protection
- External ON/OFF Control
- Safety Meets UL60950-1, EN60950-1 and IEC60950-1
- CE Marked
- RoHS Compliant to EU Directive 2011/65/EU

- Industrial Applications
- Extra Wide Input Voltage Range (4:1)
- Single and Dual Output
- No Minimum Load Required
- Input/Output Isolation (1600 VDC Minimum)
- Six-Sided Continuous Metal Shielding
- Operating Temperature Range: -40° to +85°C
- Low Profile Package: 1.00" x 2.00" x 0.40"
- Safety Approved UL60950-1, EN60950-1, IEC60950-1
- CE Mark meets 2006/95/EC, 2011/95/EC and 2004/108/EC
- RoHS Compliant to EU Directive 2011/65/EU

LWB60 SERIES

REGULATED, 60 WATT, 4:1 WIDE INPUT RANGE



Available in an extra-wide input voltage range, low-profile package, these 60-watt single and dual output DC-DC converters have no minimum load requirement and meet all relevant UL safety standards.

LPB30 SERIES

4:1 WIDE INPUT RANGE, EXTRA SMALL PACKAGE, 30 WATTS



Housed in an extra-small package, these 30-watt DC-DC converters boast high efficiency up to 92 percent and have no minimum load requirement. All units are RoHS and Reach compliant.

- Industrial Applications
- 4:1 Ultra Wide Input Voltage Range
- No Minimum Load Required
- High Efficiency Up to 92%
- Extra Small Low Profile Package: 1.0" x 1.0" x 0.39"
- Six-Sided Continuous Shield
- Safety Approvals UL60950-1, EN60950-1 and IEC60950-1
- CE Marked
- Compliant to RoHS and REACH

- Industrial Applications
- Single Output Up to 35 A
- No Minimum Load
- Adjustable Output Voltage
- High Efficiency (Up to 90%)
- Compact 2.28" x 1.45" x 0.50" Quarter Brick Package
- Safety Meets UL60950-1
- CE Marked

OFQ125 SERIES

REGULATED, 2:1 INPUT RANGE 125 WATT, QUARTER BRICK



With a single output up to 35 A and no minimum load requirement, these 125-watt quarter-brick DC-DC converters feature an adjustable output voltage, as well as UL and CE safety approvals.

MLA30 SERIES

LOW PROFILE PACKAGE,
WIDE INPUT RANGE, 30 WATT



These 30 watt DC-DC converters features high efficiency up to 80 percent, as well as short circuit and over-voltage protection in a low profile 3.0 x 2.5 x 0.3" package. Epoxy encapsulated, this series also features ON/OFF control and is RoHS II compliant.

- Industrial Applications
- Wide Input Voltage Range
- Low Profile Package: 3.0 x 2.5 x 0.3"
- Efficiency to 80%
- Short Circuit and Over-Voltage Protection
- Epoxy Encapsulated
- ON/OFF Control
- Compliant to RoHS

- Industrial Applications
- Ripple and Noise: 1.0 mV Typ.
- Very Low Noise
- Regulation Line and Load 0.2% to 0.02%
- PC Card or Chassis Mounting
- High Isolation Voltage Available
- Wide Operating Temperature Range Available
- Short Circuit Protection
- Single, Dual and Triple Outputs
- Finger-Safe Terminal Available
- Package: 2" X 2" and 2.5" X 3.5" (depending on wattage, PC Mount, 115 VAC Input)
- Safety Meets UL and CUL
- CE Marked

P3, P5 LINEAR SERIES

REGULATED, 5 VDC-250 VDC PC
CARD OR CHASSIS MOUNTING



Our AC-DC linear encapsulated power modules meet UL, CUL and CE approvals and feature a high isolation voltage option, short circuit protection and super low noise. Multiple pin configurations and packaging options are available as well as various accessories including sockets and bench adapters.

MWB40/B2A SERIES

ISOLATED, UP TO 40 WATT,
4:1 WIDE INPUT RANGE



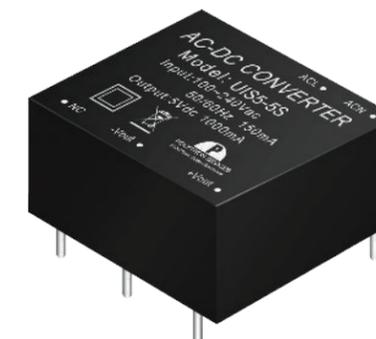
These isolated 40-watt single and dual output DC-DC converters offer high efficiency up to 89 percent, 1,600 VDC isolation and remote ON/OFF control for energy savings. A six-sided continuous shield minimizes noise leakage.

- Industrial Applications
- 4:1 Wide Input Range
- Miniature Package: 2" x 2" x 0.4"
- 1600 VDC Isolation Voltage
- Efficiency to 89%
- Six-Sided Shielding
- Remote ON/OFF Control
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection
- Under Voltage Protection
- Short Circuit Protection
- Safety Meets: IEC/UL/EN60950-1
- RoHS Compliant
- REACH Compliant
- CE Marked

- Industrial Applications
- Extra Small 1" x 1" Package
- Universal Input 90~264 VAC
- High Efficiency Up To 85%
- Protection: Short Circuit/Overload/Over Voltage
- Fully Encapsulated Plastic Case
- ROHS Compliant
- Built to meet UL60950-1, IEC60950-1

UIS5 SERIES

UNIVERSAL INPUT, 5 WATT,
EXTRA SMALL PACKAGE



Available in an extra-small 1" x 1" package, these highly-efficient AC-DC converters feature a universal input range of 90 to 264 VAC and include short circuit, overload and over voltage protection.

UIL10 SERIES

UNIVERSAL INPUT, 10 WATTS
SINGLE AND DUAL OUTPUT



These 10-watt single and dual output AC-DC power supply modules are CE-certified, come with an encapsulated plastic case and include an internal input filter.

- Industrial Applications
- Universal Input (90-264 VAC)
- High Efficiency Up to 82%
- Protection: Short Circuit/Overload/Over Voltage
- Encapsulated Plastic Case
- Dimensions (2.5" x 1.75" x .75")
- Internal Input Filter
- Safety Meets EN60950-1
- CE Certified
- Compliant to RoHS

- Industrial Applications
- Package Size: 2" x 4" x 1.16"
- 3000 VAC Reinforced Insulation
- Efficiency to 92%
- Adjustable Output Voltage
- Internal EN55022 Class Filter B
- Low Leakage Current
- Low Standby Power
- Protection Class I, Class II
- Operating Altitude: 5000 meter
- Over Current Protection
- Over Voltage Protection
- Short Circuit Protection
- Safety Meets: IEC/UL/EN60950-1
- RoHS Compliant
- REACH Compliant
- CE Marked

UI150 SERIES

UNIVERSAL INPUT, 150 WATT,
2" x 4" PACKAGE



For industrial applications, these 150-watt AC-DC converters provide high efficiency up to 92 percent and include low leakage current and standby power for additional energy savings.

UIM10 SERIES

UNIVERSAL INPUT, 10 WATTS
EXTRA SMALL PACKAGE



Available in an extra-small package, these 10-watt universal input AC-DC converters feature a universal input of 90 to 264 VAC, are RoHS compliant and meet EN60950-1 and UL60950-1 safety standards.

- Industrial Applications
- Universal Input (90-264 VAC)
- High Efficiency: 78.7% Minimum
- Protection: Over Voltage/Short Circuit/Over Current
- Encapsulated Plastic Case
- Extra Small Package:
1.61 x 0.61 x 0.72 inches (41 x 15.6 x 18.5 mm)
- Safety Meets EN60950-1, UL60950-1
- Compliant to RoHS

- Industrial Applications
- Open Frame: 5" x 3" x 1.58"
(127 x 76.2 x 40.1 mm)
- Enclosed: 5.83" x 3.15" x 1.60"
(148.2 x 80 x 40.6 mm)
- 3000 VAC Reinforced Insulation
- Adjustable Output Voltage
- Internal EN55022 Class B Filter
- Low Leakage Current
- Low Standby Power
- Operating Altitude 5000 meter
- Protection: Class I and Class II
- Remote ON/OFF
- Protection: Over Voltage/Short Circuit/
Over Current/Over Temperature
- IEC/EN/UL 60950-1
- Compliant to RoHS II and Reach
- CE Marked

UI450 SERIES

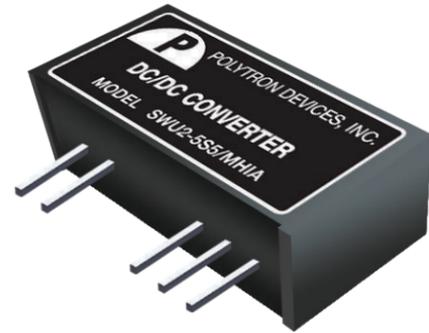
UNIVERSAL INPUT,
UP TO 450 WATT



Available in a compact open frame or enclosed package, these 450-watt AC-DC industrial power supplies feature a 5,000-meter operating altitude, 3,000 VAC reinforced insulation and adjustable output voltage.

SWU2/MHIA SERIES

SINGLE AND DUAL OUTPUT,
UNREGULATED, UP TO 2 WATTS



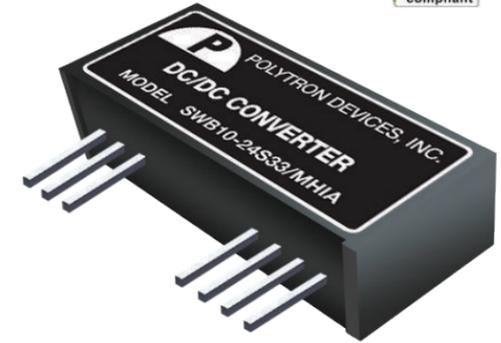
Designed for medical applications, this series of 2-watt single and dual output DC-DC converters has a patient leakage current rating of 2 μ A and is housed in an industry-standard 7-pin SIP package.

- Medical Applications
- 7-Pin SIP Package: 0.77" x 0.39" x 0.5"
- Industry Standard Pinout
- High Isolation: 4.2K VAC (6K VDC)
- High Efficiency up to 84%
- Reinforced Insulation
- Patient Leakage Current: Max 2 μ A
- Internal SMD Construction
- Operating Temperature: -40°C to +85°C
- Design Meets EN60601-1, ANSI/AAMI, ES60601-1
- RoHS Compliant

- Medical Applications
- 4:1 Wide Input Voltage Range
- 10W Miniature SIP Package: 1.27" x 0.58" x 0.35"
- 100% Burned In
- High Efficiency
- UL94V-0 Package Material
- Custom Solutions Available
- Design Refers to AAMI/CSA 60601-1, IEC/EN 60601-1 3.1 Edition
- RoHS Compliant
- Applications: Medical/Industrial/ITE

SWB10/MHIA SERIES

REGULATED, 4:1 INPUT VOLTAGE,
SIP PACKAGE, UP TO 10 WATTS



These regulated DC-DC converters provide up to 10 watts of power and efficiency up to 83 percent. Units are suitable for medical applications, as well as industrial and ITE equipment.

TWA3/MHIA SERIES

REGULATED, 2:1 WIDE INPUT
RANGE, 3 WATTS



Housed in a miniature DIP package, these 3-watt 2:1 wide input DC-DC converters feature a clearance and creepage distance of 8 mm/2 MOPP and built-in Class A filter.

- Medical Applications
- 2:1 Wide Input Voltage Range
- Miniature DIP Package: 1.25" x 0.80" x 0.40"
- High Efficiency: To 89%
- Operating Temperature Range: -40° - +105°C (with derating)
- Clearance and Creepage Distance: 8.0 mm/2 MOPP
- Reinforced Insulation
- 5000 VAC Input to Output 2 MOPP Isolation
- 2 MOPP
- Built-In EMI Class A Filter
- 2 μ A Patient Leakage Current
- Safety Meets UL, CE and ANSI/AAMI ES60601-1, EN60601-1 and IEC60601-1
- CE Marked
- RoHS Compliant to 2011/65/EU

- Medical Applications
- 4:1 Wide Input Voltage Range
- Miniature DIP Package
- Operating Temperature Range: -40° to +105°C (with derating)
- Miniature DIP Package: 1.25" x 0.80" x 0.40"
- High Efficiency: to 89%
- Reinforced Insulation
- Clearance and Creepage Distance: 8.0 mm
- 2 MOPP
- 5000 VAC Input/Output 2 MOPP Isolation
- Built-In EMI Class A Filter
- 2 μ A Patient Leakage Current
- Medical Safety Approvals Including: UL, CE and ANSI/AAMI ES60601-1, EN60601-1 and IEC60601-1
- RoHS Compliant to 2011/65/EU

TWB10/MHIA5 SERIES

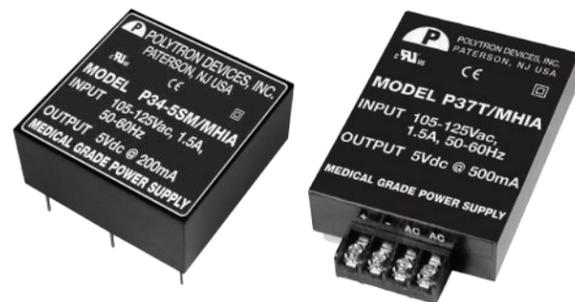
4:1 INPUT RANGE, 10 WATTS,
MINIATURE DIP PACKAGE



Designed for medical safety and housed in a miniature DIP package, these 10-watt single and dual output DC-DC converters have a patient leakage current of 2 μ A and clearance and creepage distance of 8 mm/2 MOPP.

P3, P5 MHIA SERIES

LINEAR, 5 VDC-250 VDC,
EXTRA LOW NOISE, 2 MOPP



These AC-DC Linear Encapsulated Power Supplies provide very low 1.0 RMS output noise for a wide range of medical applications, from surgical devices to imaging equipment. Choose from PC or chassis mount.

- Medical Applications
- Up to 5700 VDC I/O Isolation
- Reinforced Insulation
- 2 MOPP
- 2 μ A Patient Leakage Current
- Regulation Line and Load 0.02% to 0.2%
- Short Circuit Protection
- Single, Dual and Triple Outputs
- International Input Voltages Available Including Dual/Switchable Input Voltages
- Very Low RMS Output Noise
- Optional Wide Operating Temperature Range
- Built for In-Device Operation
- Packages Available: PC Mount, Chassis Mount with Screw Terminals
- Meets IEC 60601-1 3rd Edition
- CE Marked

- Medical Applications
- Universal Input Range
- Desktop Package: 7.78" x 4.01" x 2.01"
- DC Output Connector with Push Release Safety Tab
- 4000 VAC Input/Output Isolation
- 2 MOPP
- Class I Protection
- Active PFC Function DoE VI Compliance
- RoHS Compliant
- Built-In Protection: Over Voltage/Short Circuit/Over Current/Over Temperature
- High Efficiency: 87.5% Minimum
- LED Indication
- MTBF > 100,000 Hours
- CEC level V1, UL/CUL 60601-1, EN60601-1 and IEC60601-1 3rd Edition, FCC, CE, CB

MUI310-A SERIES

UNIVERSAL INPUT, DESK TOP,
230-310 WATTS



These desktop AC-DC power supplies for medical applications feature LED indication, as well as built-in over voltage, over current, over temperature and short circuit protection. Units meet a range of safety approvals and compliances.

MUI65 SERIES

UNIVERSAL INPUT, 65 WATT
COMPACT PACKAGE



Available in a variety of mounting options, these 65-watt AC-DC power supplies feature a universal input range, high efficiency up to 92 percent and low leakage current under 75 μ A.

- Medical Applications
- Universal Input Range
- Operating Temperature Range: -25° to 80°C (with derating)
- Compact Package: 2.00" x 3.00" x 1.16"
- Mounting Options: Screw Terminal, Chassis Mount, Din Rail, Open Type, Enclosed (Standard)
- High Efficiency: Up to 92%
- Active Power Factor Correction
- Low Leakage Current Under 75 μ A
- Built-in EMI Class A Filter
- 2000 VAC Input to Output 2 MOPP Isolation
- Class I and Class II Protection
- Medical Safety Approvals: UL, CE and ANSI/AAMI, ES60601-1, EN60601-1 and IEC60601-1 3rd Edition
- RoHS Compliant to 2011/65/EU
- 0.11 Watt Low Standby Power Consumption
- Operating Altitude 5000 M

- Medical Applications
- Universal Input Range
- 2 MOPP
- 4000 VAC Reinforced Insulation
- Adjustable Output Voltage
- Internal EN55022 Class B Filter
- Low Leakage Current
- Low Standby Power
- Operating Altitude 5000 meter
- Protection Class I
- Remote ON/OFF
- Protection: Over Voltage/Short Circuit/Over Current/Over Temperature
- Safety Approvals: ANSI/AAMI ES60601-1, EN60601-1 and IEC60601-1 3rd Edition
- CE Marked: IEC60601-1-2 ED4.0
- Compliant to RoHS II and Reach
- Open Frame: 5" x 3" x 1.58" (127 x 76.2 x 40.1 mm)
- Enclosed: 5.83" x 3.15" x 1.60" (148.2 x 80 x 40.6 mm)

MUI450 SERIES

UNIVERSAL INPUT,
UP TO 450 WATTS



For medical applications, these 450-watt AC-DC power supplies feature low leakage current and standby power, as well as 4,000 VAC reinforced insulation, 2 MOPP and adjustable output voltage.

TWRB10 SERIES4:1 WIDE INPUT RANGE,
DIP PACKAGE, 10 WATTS

Housed in a miniature DIP package, these 10-watt single and dual output DC-DC converters feature 1,500 VDC isolation voltage, 100 percent burn-in for reliability and remote ON/OFF control for energy savings in railway applications.

- Railway Applications
- 4:1 Wide Input Voltage Range
- High Efficiency Up to 83%
- Isolation Voltage: 1500 VDC
- 10W DIP Package: 1.25" x 0.8" x 0.4"
- 100% Burned In
- UL94V-0 Package Material
- Custom Solutions Available
- Remote ON/OFF
- EN50155 Railway Standard
- Compliant to RoHS

RWB20 SERIESREGULATED, 20 WATT,
4:1 WIDE INPUT RANGE

Designed for railway applications, these 20-watt single and dual output DC-DC converters have an output current up to 2.4 A and meet all relevant railways safety standards.

- Railway Applications
- 4:1 Ultra Wide Input Voltage Range: 9-36 VDC, 18-75 VDC and 43-160 VDC
- Standard 1.00" x 2.00" x 0.40" Package
- 20 Watts Output Power
- Output Current up to 2.4 A
- High Efficiency (Up to 88%)
- CE Mark Meets 2006/95/EC, 93/68/EEC and 2004/108EC
- UL60950-1, EN60950-1, IEC60950-1 and EN50155 Licensed
- RoHS Compliant to EU Directive 2011/65/EU

RLPB15 SERIESREGULATED, UP TO 15 WATTS,
4:1 WIDE INPUT RANGE

These miniature 15-watt single and dual output DC-DC converters feature high efficiency up to 91 percent, low standby power, high reliability power and remote ON/OFF control for energy savings.

- Railway Applications
- 4:1 Wide Input Voltage Range
- High Efficiency Up to 91%
- Miniature and Low Profile Package: 1.0" x 1.0" x 0.39"
- 3000 VDC Isolation Voltage
- Internal EN55032 Class A Filter
- Low Standby Power
- High Reliability Power
- Remote ON/OFF
- Protection: Over Voltage/Short Circuit/Over Current/Under Voltage
- Six-Sided Continuous Shield
- EN50155 and EN45545-2 Railway Standard
- Safety Meets UL60950-1, EN60950-1, IEC60950-1, UL62368-1, EN62368-1 and IEC62368-1
- CE Marked
- Compliant to RoHS and Reach

FWB150 SERIES4:1 WIDE INPUT RANGE,
150 WATTS, CHASSIS MOUNT

With a chassis mount and built-in Class A filter, this 200-watt DC-DC converter features adjustable output voltage, a six-sided continuous shield and input to output isolation of 2,250 VDC.

- Railway Applications
- 4:1 Wide Input Range (9-36, 43-160 VDC)
- 3.68" x 2.07" x 0.67" Wall Mount Package
- No Minimum Load Required
- High Efficiency: Up to 89%
- Built In EN55011 and EN55022 Class A Filter
- Optional EMI B Filter Available, Meets EN55032 Class B
- Input to Output Isolation: 2250 VDC
- Adjustable Output Voltage
- Six-Sided Continuous Shield
- UL60950-1, EN60950-1 IEC60950-1 and EN50155 Approved
- CE Marked
- RoHS and Reach Compliant

HWB200 SERIES

4:1 WIDE INPUT RANGE UP TO
200 WATTS, HALF-BRICK



Ideal for railway system applications, these 200-watt half-brick DC-DC converters feature a remote control, 2,250 VDC basic insulation and high efficiency up to 91 percent.

- Railway Applications
- 4:1 Ultra Wide Input Range
- Half Brick Package 2.28" x 2.40" x 0.50"
- No Minimum Load Required
- High Efficiency Up to 91%
- Remote Control
- 2250 VDC Basic Insulation (24 and 48 Vin)
- UL60950-1, EN60950-1, IEC60950-1 Safety Approvals
- Meets: EN50155, EN50121-3 and EN61373
- CE Marked
- Compliant to RoHS and Reach

TWB8 SERIES

4:1 WIDE INPUT RANGE,
8 WATTS



Certified for railway applications, our 8-watt single and dual output DC-DC converter includes a standard 24-PIN DIP package, optional SMD package and output currents up to 2.4 A.

- Railway Applications
- 4:1 Ultra Wide Input Voltage Range: 9-36 Vdc, 18-75 Vdc, and 43-160 Vdc
- Industry Standard 24 PIN DIP Package: 1.25" x 0.80" x 0.4"
- SMD Package Optional (Suffix "S")
- 8 Watts Output Power
- Output Current up to 2.4A
- High Efficiency up to 88%
- Safety meets UL60950-1, EN60950-1, IEC60950-1, and EN50155
- CE Mark meets 2006/95/EC, 2011/95/EC, and 2004/108/EC
- RoHS Compliant to EU Directive 2011/65/EU



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