II TRACO POWER

2022~2023 | DC/DC Converters AC/DC Power Supplies

Product Portfolio



■ TRACO POWER

Company Profile

TRACO Electronic AG is a Swiss company with headquarters based in Baar, Switzerland. As a leading power supply specialist with more than 40 years experience we are dedicated to the design and manufacturing of high quality DC/DC and AC/DC power conversion products.

TRACO markets its products worldwide under the registered trademark TRACO POWER. Our mission is to provide our customers with optimal power supply solutions in terms of performance, quality and cost for their individual application.

Product Range

TRACO POWER's product range focuses on the four vertical markets: Industrial, Medical & Healthcare, Railway/Ruggedized and Building Technology & Household.

Within these markets TRACO offers one of the most comprehensive programs for standard products in application areas such as: Test & Measurement, Automation & Control, Robotics, Machinery, Therapy, Diagnostic, Laboratory, Home & Office Automation, White Goods, Transportation, Construction & Farming, Information Technology, Smartgrid, Renewable Energy, Oil & Gas.

Detailed product data can be downloaded from our website: www.tracopower.com

lcons used throughout the catalog



High isolation products for medical applications

- Product certification according to IEC/EN/ES 60601-1 3rd edition for 2 × MOPP
- EMC emission according to IEC 60601-1-2 ed. 4
- Risk management process according to ISO 14971 including risk management file
- Acceptance criteria for electronic assemblies according to IPC-A-610 Level 3
- Design and production according to ISO 13485 quality management system
- 5-year product warranty



Ruggedized DC/DC converters for railway applications

- Approved to EN 50155 for electronic equipment used on rolling stock
- Shock and vibration test according EN 61373
- Qualification for the fire behavior of components according to EN 45545-2



Building Technology/Household

Product certification according to IEC/EN 60335-1



Harsh Industrial Environments

- EN 60079-15 II3G EX for
- HAZLOC UL 121201 Class I; Div 2 (options)

DC/DC Converters

PRODUCT TYPE	POWER RANGE	PAGE
Non-Isolated Step Down DC/DC Converters (POL) in SIP Package	0.5-30 Amp	5
Non-Isolated Step Down DC/DC Converters (POL) SMD Package	0.5-30 Amp	5-6
SMD DC/DC Converters	1-5 Watt	6–7
SIP DC/DC Converters	1–12 Watt	7–9
High Performance DC/DC Converters	1–60 Watt	9–13
High Power DC/DC Converters / RIA12 Surge Filters	40-300 Watt	13–14
Industrial DIN-Rail Mount DC/DC Converters	20-300 Watt	14
Industrial High Power Converters	150 Watt – 40 kW / 45 kVA	15

AC/DC Power Supplies

PRODUCT TYPE	POWER RANGE	PAGE
 Encapsulated AC/DC Power Modules	3-100 Watt	
 Metal Enclosure and Open Frame Power Supplies	15-960 Watt	17–19
Outdoor Power Supply	120 Watt	19

DIN-Rail Mount System Solutions

PRODUCT TYPE	POWER RANGE	PAGE
DIN-Rail Power Supplies	6-600 Watt	20
UPS Systems and Function Modules (DIN-Rail and Industrial Cabinets)	72-600 Watt	21

All TRACO POWER Products

We offer one of the most comprehensive portfolios of standard products with above-average availability from both factory stock and our network of stocking distributors. All our products offer industry leading performance characteristics and are safety qualified for general use in applications around the globe.



All Products

for General ITE / IoT / Industrial applications

- RoHS and Reach compliance
- · ISO 9001 / ISO 14001 processes
- Industry-leading performance
- 3-year product warranty

IEC/EN/UL 62368-1 Approvals & CE Mark

STANDARD /DC DC CONVERTERS:



Medical / Reinforced 1 - 60 Watt



Railway / Ruggedized 3 - 300 Watt



Brick Converters 40 - 200 Watt



DIN Rail Industrial 20 - 200 Watt



Chassis Mount 6 - 60 Watt



Surface Mount 1 - 5 Watt



SIP Converters up to 12 Watts / 30 Amps



DIP Converters 1 - 60 Watt

STANDARD AC/DC POWER SUPPLIES:



Harsh Industry and Ex 50 - 600 Watt



Encapsulated Switchers 2 - 100 Watt



Metal Enclosure 15 - 1000 Watt



Building Automation 6 - 150 Watt



Medical Reinforced 5 - 850 Watt



Open Frame Design 15 - 850 Watt



Outdoor Supply 120 Watt



DIN Rail 6 - 600 Watt

TRACO POWER Industry Specific Solutions

our specialized products offer additional features to enhance performance and satisfy the safety requirements for industry-specific applications and environments





Applied parts & BF rated applications

- Increased creepage & clearance
- Secondary / reinforced insulation
- EMC to IEC 60601-1-2 ed. 4
- Extended 5 year warranty

IEC/EN/ES 60601-1 3rd edition for 2 × MOPP IEC/EN/UL 62368-1 Approvals & CE Mark

Ruggedized DC/DC Converters

- Withstand thermal and mechanical shock
- Wide input ranges with brownout protection
- Increased reliability and longer lifetimes
- · Inscreased galvanic Isolation

EN 50155 and EN 61373 Approvals IEC/EN/UL 62368-1 Approvals & CE Mark





Household, smart buildings and office applications.

- ErP Ready low standby power
- Power conversion efficiency up to 94%
- Compact designs with highest power density
- Protection class II prepared

EN 60335-1 Approvals IEC/EN/UL 62368-1 Approvals & CE Mark For harsh and demanding environments.

- Metal case (shock and vibration proof)
- Remote On/Off and alarm output
- Optional modules for redundancy, extended hold-up and battery control

EN 60079-15 II3G EX HAZLOC UL 121201 Class I; Div 2 (options) IEC/EN/UL 62368-1 Approvals & CE Mark

- Alternative to linear voltage regulators
- High efficiency up to 97%
- No heat-sink required
- Over-temperature protection
- Excellent line / load regulation
- Operating temperature -40 to +85°C

0.5 AMP

- +Vin/+Vout
- Input 4.75-32 VDC
- 1.5 to 15 Vout fixed
- LM78xx compatible
- 11.5 × 7.6 × 10.2 mm



- **0.6 AMP**
- +Vin/+Vout
- Input 9.0-72 VDC
- 3.3 to 24 Vout fixed LM78xx compatible
- 12 × 8.6 × 13.4 mm

1 AMP

- +Vin/+Vout
- Input 1.2-36 VDC
- 1.5 to 15 Vout fixed LM78 compatible
- 11.7 × 7.6 × 10 mm



TSN₁

TSR 1

1 AMP

- +Vin/+Vout
- Input 6-36 VDC
- 3.3 and 5.0 Vout fixed
- Cost optimized design
- LM78xx compatible
- 11.5 × 7.6 × 10.2 mm

TSR 1E

- 1.0 AMP
- +Vin/+Vout
- Input 9.0–72 VDC
- 3.3 to 24 Vout fixed LM78xx compatible
- 12.1 × 8.6 × 17.5 mm

TSR 1WI

TSR 0.6WI

- 1 AMP
- -Vin/-Vout ■ Input -7.0-32 VDC
- -5.0 to -15 Vout fixed
- LM79 compatible
- 11.7 × 7.5 × 16.5 mm



TSR 2

1 AMP

- +Vin/+Vout or -Vout
- Input 4.6-36 VDC
- (±)1.5 to 15 Vout fixed
- 11.7 × 7.5 × 10.2 mm

TSRN 1

- 1.5 AMP
- +Vin /+Vout ■ Input 7-36 VDC
- 3.3, 5.0, 12 Vout fixed
- Cost optimized design
- LM78xx compatible
- 9.6 × 6.4 × 14.9 mm



TOS

TSR 1.5E

2 AMP

- +Vin/+Vout
- Input 3.0-36 VDC 1.2 to 15 Vout fixed
- LM78 compatible
- 14 × 7.5 × 10.1 mm



3 AMP

- +Vin/+Vout or -Vout
- Input 2.5-30 VDC
- (±) 0.6 to 15 Vout adjust.
- Remote On/Off
- Open frame
- 16.5 × 10.4 × 6 mm



TSR 0.5SM

TSR 3

6-30 AMP

- +Vin/+Vout
- Input 2.4-14 VDC 0.75 to 5.5 Vout adjust.
- Remote On/Off
- Open frame



Non-Isolated Step Down DC/DC Converters (POL) SMD Package

0.5-30 Amp

- Alternative to linear voltage regulators
- High efficiency up to 97%
- No heat-sink required
- Over-temperature protection
- Excellent line / load regulation
- Operating temperature -40 to +85°C

0.5 AMP

- +Vin/+Vout
- Input 4.75-32 VDC
- 1.4 to 15.5 Vout adjust.
- Remote On/Off
- 15.3 × 9.6 × 9.2 mm

1 AMP

- +Vin/+Vout
- Input 3.0-36 VDC
- 1.2 to 15 Vout fixed
- 15.2 × 9.3 × 7.6 mm

TSR 1SM

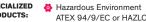
1 AMP

TSRN 1SM

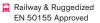
- +Vin/+Vout or -Vout ■ Input 3.0-42 VDC
- (±)1.2 to 15.5 VDC adjust. Remote On/Off
- 15.2 × 9.3 × 7.3 mm















ATEX 94/9/EC or HAZLOC

6-30 AMP

TOS

- +Vin/+Vout
- Input 2.4–14 VDC
- 0.75 to 5.5 VDC adjust.
- Remote On/Off
- Open frame



SMD DC/DC Converters

1-5 Watt

- MSL Level 2a or better
- Operating temperature -40 to +85°C
- 1500 VDC I/O-isolation (standard)
- Single and dual output models
- Washable models on request
- Available in tape & reel package

1 WATT

TES 1N

- Cost efficient design
- ±10% Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 13.6 × 8.8 × 7.85 mm (single)

2:1/3:1 Input 4.5 to 75 VDC

■ 15.2 × 8.4 × 7.85 mm (dual)xx



1 WATT

TES 1

1 WATT

TES_{1V}

- **NEW** under development

■ ±10% Input 5, 12, 24 VDC

- 3.3 to 15 VDC (unregulated)
- 13.7 × 8.0 × 7.0 mm (single)
- $16.2 \times 8.0 \times 7.0 \text{ mm (dual)}$



TDN 1WISM

- 3000 VDC I/O-isolation
- ±10% Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated) ■ 16.3 × 8.0 × 8.0 mm



1 WATT

3.3 to 24 VDC

■ 11.9 × 11.3 × 8.0 mm

TRN 1SM

- - 3.3 to 24 VDC
 - Remote On/Off

1 WATT

■ 13.2 × 9.1 × 10.2 mm

4:1 Input 4.5 to 75 VDC



1 WATT

TMR 1SM

- 2:1 Input 4.5 to 75 VDC
 - 5.0 to 24 VDC
 - Remote On/Off ■ 18.9 × 13.7 × 8.7 mm



TMR 2WISM

1 WATT

TRI 1SM

NEW under development

- Unregulated
- 3000 VAC I/O-isolation rated for 480 VACrms working voltage (reinforced)
- 8000 VDC peak isolation (1s)
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- 18.9 × 13.7 × 10.5 mm



2 WATT

- ±10 % Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 16.3 × 9.3 × 8.9 mm



TRS 2

TES 2H

2 WATT

4:1 Input 4.5 to 75 VDC

- 5.0 to 24 VDC
- Remote On/Off
- IEC/UL 62368-1
- 19.0 × 14.9 × 8.7 mm



TES 2M

2 WATT

TDR 2(WI)SM

- Epoxy over mold (washable)
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- IEC/UL 62368-1
- 18.9 × 12.8 × 8.7 mm



2 WATT

- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 11.3 × 8.0 mm



TRN 3SM

2 WATT

4 kVAC I/O-isolation

- ±10 % Input 5, 12, 24 VDC
- 5.0 to 15 VDC (unreg.)
- IEC 60601-1 (2 × MOOP)
- 24.0 × 13.7 × 9.3 mm

2 WATT

- TIM 2SM
- Medical safety approval 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- IEC/UL 62368-1, IEC/ES 60601-1
- SMD-16 (24.3 × 14.4)



3 WATT

- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 11.3 × 8.0 mm

3 WATT

4:1 Input 4.5 to 75 VDC

- 3.3 to 24 VDC
- Remote On/Off
- Compact design ■ 13.2 × 9.1 × 10.2 mm



TDN 3WISM

TMR 3WISM

3 WATT

TDR 3(WI)SM

TIM 3.5SM

- 4:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- Remote On/Off
- IEC/UL 62368-1
- 19.0 × 14.9 × 8.7 mm



- Epoxy over mold (washable)
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- Remote On/Off
- IEC/UL 62368-1
- 18.9 × 12.8 × 8.7 mm



- Medical safety approval (2 × MOPP)
- 2:1/3:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC

3.5 WATT

- IEC/UL 62368-1, IEC/ES 60601-1
- SMD-16 (24.3 × 14.4)



5 WATT

TDN 5WISM

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- Compact design
- 13.2 × 9.1 × 10.2 mm



SIP DC/DC Converters

1-12 Watt

- Single and dual output models (standard)
- Operating temperature -40 to +85°C
- IT approval acc. to IEC/EN/UL 62368-1 (for regulated & high isolation converters)
- 1500 VDC I/O-isolation (standard)

1 WATT

Unregulated

5.0 to 15 VDC

■ 19.5 × 6 × 10 mm

TBA 1E

- 1 WATT
 - Unregulated
 - Cost optimized design
 - ±10% Input 5 VDC
 - 5 VDC output (single)
 - 19.5 × 6 × 10 mm



TEA 1E

1 WATT

- Unregulated
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6.1 × 10.2 mm



TMA

TME

1 WATT

- Unregulated
- Short circuit protection

Short circuit protection

±10% Input 5 to 24 VDC

- Compact design
- ±10% Input 3.3 to 24 VDC
- 3.3 to 15 VDC (single only)
- 11.7 × 6 × 10 mm



TBA 1

1 WATT

- Unregulated
- Compact and cost optimized design
- ±10% Input 5 VDC
- 5 VDC output (single)
- 11.7 × 6 × 10.2 mm

TEA 1

Unregulated

1 WATT

- Compact design
- ±10% Input 3.3 to 24 VDC
- 3.3 to 15 VDC (single only)
- 11.5 × 6.1 × 10.2 mm



TEA 1HI

1 WATT

- Unregulated
- 3000 VDC I/O-isolation
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6.1 × 10.2 mm



TMV-HI

TMV

1 WATT

- Unregulated Short circuit protection
- 3000 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6 × 10 mm



TBA 1HI

1 WATT

- Unregulated 4000 VDC I/O-isolation
- Cost optimized design
- ±10% Input 5 VDC
- 5 VDC output (single)
- 19.5 × 6 × 10 mm



1 WATT

- Unregulated
- 5200 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 3.3 to 15 VDC
- 19.5 × 7.5 × 10.2 mm



1 WATT

- Unregulated 3000 VDC reinforced I/O-isolation
- ±10 %Input 5 to 12 VDC
- 5.0 to 15 VDC
- 22.0 × 7.5 × 12.5 mm



TMV-EN

1 WATT

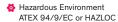
NEW under development

- Unregulated
- 3000 VAC I/O-isolation rated for 480 VACrms working voltage (reinforced)
- 8000 VDC peak isolation (1s)
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- 21 × 12.5 × 7.5 mm



TRI 1











1 WATT TRV 1 1 WATT TRV 1M 1 WATT Semi regulation (load) Semi regulation Regulated 3000 VDC I/O-isolation Medical safety approval (2 × MOPP) 2:1/3:1 Input 4.5 to 75 VDC

 ±10% Input 5 to 24 VDC ■ 5.0 to 15 VDC ■ 19.5 × 6.1 × 10.2 mm

 5000 VAC I/O-isolation (reinforced) ±10% Input 5 to 24 VDC 3.3 to 15 VDC ■ 19.6 × 9.8 × 12.5 mm

3.3 to 24 VDC ■ 11.9 × 7.7 × 11.0 mm

1 WATT TMR 1 2 WATT Regulated 2:1 Input 4.5 to 75 VDC

TBA 2

NEW under development Unregulated

 Short circuit protection 1500 VDC I/O-isolation

±10% Input 5 to 24 VDC 5 to 24 VDC output

■ 11.3 × 7.6 × 10.4 mm



TMU 2

2 WATT TMV 2HI

 Unregulated ■ 5200 VDC I/O-isolation

±10% Input 5 to 24 VDC

3.3 to 15 VDC

■ 19.5 × 7.1 × 10.2 mm



TRN 1

2 WATT

5.0 to 24 VDC

■ 17.0 × 7.6 × 11.0 mm

Unregulated Short circuit protection

1500 VDC I/O-isolation ±10% Input 5 to 24 VDC

■ 5.0 to 15 VDC

■ 19.5 × 7.6 × 10.2 mm



TMR 2

Unregulated

2 WATT

±10% Input 5 to 24 VDC

■ 5.0 to 15 VDC

■ 19.5 × 7.5 × 10.2 mm



TMH

2 WATT TEC 2(WI)

Regulated

2:1 or 4:1 Input 4.5 to 75 VDC

3.3 to 24 VDC

Remote On/Off

21.8 × 9.1 × 11.2 mm



TRV 2M

2 WATT

Regulated

2:1 Input 4.5 to 75 VDC

3.3 to 12 VDC

Remote On/Off

■ 21.8 × 9.2 × 11.1 mm



2 WATT

Regulated

4:1 Input 4.5 to 75 VDC

3.3 to 15 VDC

Remote On/Off

■ 21.8 × 9.3 × 11.2 mm



TMR 2WIN

2 WATT

NEW

Semi regulation

Medical safety approval (2 × MOPP)

5000 VAC I/O-isolation (reinforced)

±10% Input 5 to 24 VDC

3.3 to 15 VDC

19.6 × 9.8 × 12.5 mm



3 WATT

Unregulated

Short circuit protection

1500 VDC I/O-isolation

±10% Input 5 to 24 VDC

5.0 to 15 VDC

■ 11.5 × 8.6 × 10.2 mm



3 WATT

Regulated

2:1/3:1 Input 4.5 to 75 VDC

3.3 to 24 VDC

11.9 × 7.7 × 11.0 mm



TMR 3HI

TRN 3

3 WATT

TEC 3(WI)

Regulated

2:1 or 4:1 Input 4.5 to 75 VDC

3.3 to 24 VDC

Remote On/Off

21.8 × 9.1 × 11.2 mm



3 WATT

TMR 3(WI)

Regulated

2:1 or 4:1 Input 4.5 to 75 VDC

3.3 to 15 VDC

■ Remote On/Off

■ 21.8 × 9.2 ×811.2 mm



3 WATT

Regulated

3000 VDC I/O-isolation

2:1 Input 4.5 to 75 VDC

3.3 to 15 VDC Remote On/Off

■ 21.8 × 9.2 × 11.2 mm



TMR 4(WI)

3 WATT

TVN 3

Ultra low ripple & noise

2:1/3:1 Input 4.5 to 75 VDC

3.3 to 24 VDC ■ Remote On/Off

21.8 × 9.6 × 11.2 mm



■ TMR 3WIR

4 WATT

Regulated 2:1 or 4:1 Input 9 to 75 VDC

5 to 24 VDC

Remote On/Off

21.8 × 9.3 × 11.2 mm



6 WATT

TMR 6(WI)

Regulated

2:1 or 4:1 Input 4.5 to 75 VDC

 3.3 to 24 VDC Remote On/Off

21.8 × 9.1 × 11.2 mm



3 WATT

 Railway approval Regulated

 3000 VDC I/O-isolation 4:1 Input 9 to 160 VDC

3.3 to 24 VDC

■ 21.8 × 9.6 × 11.2 mm



■ TMR 6WIR

9 WATT

TMR 9(WI)

12 WATT

TMR 12WI NEW

- Railway approval
- Regulated
- 3000 VDC I/O-isolation
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC
- 21.8 × 9.6 × 11.2 mm



- Regulated
- 2:1or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- 21.8 × 9.1 × 11.2 mm



- Regulated
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- 22 × 9.6 × 12 mm



High Performance DC/DC Converters

1-60 Watt

- Fully regulated outputs
- Single, dual (and triple) output models
- 1500 VDC I/O-isolation (standard)
- IT approval acc. to IEC/EN/UL 62368-1
- Operating temperature -40 to +85°C
- Opt. heat-sink for most >10 Watt models
- Remote On/Off control

1 WATT

TDU 1

NEW under development

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 5 to 15 VDC output
- 12.7 × 10.2 × 8.0 mm



1 WATT

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm

TDN 1WI

2 WATT

TDL 2

- Compact design
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- 14.0 × 14.0 × 8.0 mm



THI 2M

2 WATT

TDR 2(WI)

- Epoxy over-mold
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- 18.9 × 12.8 × 8.7 mm



2 WATT

- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)

TEL 2

2 WATT

- Unregulated
- 2 × MOOP
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- DIP-16 (23.8 × 13.7)



TDN 3WI

2 WATT

- **TIM 2**
- Medical safety approval
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- DIP-16 (24.3 × 14.4)



3 WATT

- Compact design
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- 14.0 × 14.0 × 8.0 mm

TDL 3

3 WATT

- Ultra compact design
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm



TEM 3N

TRI 3

3 WATT

TDR 3(WI)

- Epoxy over-mold
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- 18.9 × 12.8 × 8.7 mm



3 WATT

- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



THL 3WI 3 WATT

Cost down redesign

- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



3 WATT

TEN 3(WI)N

- Cost down redesign
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



3 WATT

- Railway approval
- 4:1 Input 36 to 160 VDC 3.3 to 24 VDC
- Reinforced Isolation DIP-24 (32 × 20.3)



■ TEN 3WIRH

3.5 WATT

■ 5000 VAC I/O-isolation rated for 1000 Vrms working voltage

- 2:1 Input 4.5 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



THR 3WI

NEW

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 9 to 160 VDC
- 5 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



Regulated

3 WATT

- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 2 x MOOP
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



H TIM 3.5

THI 3

- 3 WATT Regulated
- 4:1 Input 9 to 160 VDC
- 5.0 to 12 VDC
- 2 × MOOP
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



THP 3

3 WATT

◆ THM 3(WI)

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter

Ultra low ripple & noise

4:1 Input 4.5 to 75 VDC

■ EN 55032 class B filter

■ DIP-24 (32 × 20.3)



3.5 WATT

- Medical safety approval
- 2:1/3:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- DIP-16 (24.3 × 14.4)



TEL 5

TEL 6

5 WATT

TDN 5WI

- Highest power density
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm



5 WATT

3.3 to 48 VDC

TVN 5WI

- 5 WATT
 - Cost optimized 2:1 Input 9 to 36 VDC
 - 3.3 to 15 VDC
 - DIP-24 (32 × 20.3)



6 WATT

TMDC 06

- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- Chassis/DIN-rail
- Screw terminal connection
- 53 × 34 × 26.5 mm



6 WATT

Case pin ■ DIP-24 (32 × 20.3)

> TMDC 06H NFW

- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- Chassis/DIN-rail
- Screw terminal connection
- 53 × 34 × 26.5 mm

6 WATT

- **NEW** under development Cost efficient design
- 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.3 × 14.4)



6 WATT

TEL 6WI **NEW** under development

- Cost efficient design
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.3 × 14.4)



NEW

6 WATT

TEN 6(WI)N

- 3.3 to 24 VDC
- EN 55032 class A filter

2:1 or 4:1 Input 9 to 75 VDC

■ DIP-24 (32 × 20.3)



6 WATT

TEN 6WIN-HI

- 3000 VDC I/O-isolation
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



⊕ THM 6(WI)

6 WATT

- Railway approval
- 4:1 Input 36 to 160 VDC
- 3.3 to 24 VDC
- Reinforced Isolation
- DIP-24 (32 × 20.3)



I TEN 6WIRH

6 WATT

TRI 6

6 WATT

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter ■ DIP-24 (32 × 20.3)



TEN 8

6 WATT

TIM 6

- **NEW** under development Medical safety approval
- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter



5.0 to 24 VDC

TEL 8(WI)

- 8 WATT
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



8 WATT

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 15 VDC
- Increased EMC immunity
- DIP-24 (32 × 20.3)



IN8 MED 4

8 WATT

2:1 or 4:1 Input 9 to 75 VDC

5000 VAC I/O-isolation rated for

1000 Vrms working voltage

2:1 Input 9.0 to 75 VDC

■ EN 55032 class A filter

■ DIP-24 (32 × 20.3)

- 3.3 to 24 VDC
- EN 55032 class A filter



- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC



TEL 10

10 WATT

TEL 10WI

10 WATT

THD 10(WI)N

- Highest power density of 3.83 W/cm³
- 2:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



- Highest power density of 3.83 W/cm3
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



■ TEN 10WIRH

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



10 WATT

Railway approval

Increased EMC

immunity

10 WATT

EN 55032 class A filter

4:1 Input 9 to 160 VDC

3.3 to 24 VDC adjust.

THN 10WIR

- Railway approval

10 WATT

- 4:1 Input 36 to 160 VDC
- 3.3 to 24 VDC
- Reinforced Isolation
- DIP-24 (32 × 20.3)



10 WATT

TRI 10 NEW

- 5000 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



■ 1"×1"

THR 10WI **NEW**

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 9 to 160 VDC
- 5 to 24 VDC
- FN 55032 class A filter
- 2"×1"



10 WATT

◆ THM 10(WI)

NEW

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



TEL 12

10 WATT

TMDC 10

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 79 × 34 × 22 mm



TEL 12WI

10 WATT

TMDC 10H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 79×34×22 mm

12 WATT

- Highest power density of 3.61 W/cm³
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



12 WATT

- Highest power density of 3.61 W/cm3
- 4:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



THN 15N

12 WATT

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter DIP-24 (32 × 20.3)



THD 12(WI)

15 WATT

2:1 or 4:1 Input 9 to 75 VDC

- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



THD 15(WI)N

- **15 WATT**
- 2:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- EN 55032 class A filter ■ 1"×1"
- Low no-load power consumption



15 WATT

THL 15WI

- cost efficient design
- 4:1 Input 9 to 75 VDC 3.3 to 24 VDC adjust.
- EN 55032 class A filter ■ 1"×1"



15 WATT

THN 15WI

- 4:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- 1"×1"
- Remote On/Off



15 WATT

TEL 15N

- **NEW** under development Highest power density 4.51 W/cm³
- 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



15 WATT

TEL 15N-HS

NEW under development High temperature range, up to 70°C

- without derating 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.4 × 14.3 × 24.4)



15 WATT

TEL 15WIN

- Highest power density of 4.51 W/cm³
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



15 WATT

TEL 15WIN-HS

NEW under development High temperature range, up to 70°C without derating

- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.4 × 14.3 × 24.4)



11

15 WATT TRI 15 15 WATT **THN 15WIR 15 WATT** 4200 VAC I/O-isolation rated for Railway approval 1000 Vrms working voltage EN 55032 class A filter 2:1 Input 9 to 75 VDC 4:1 Input 9 to 160 VDC 5.0 to 24 VDC 5.1 to 24 VDC ■ EN 55032 3.3 to 48 VDC adjust. ■ EN 55032 class A filter Increased EMC immunity class A filter ■ 1.6"×1" ■ 1"×1" ■ 2"×1" **TEN 20WIN** THN 20(WI) **20 WATT 20 WATT 20 WATT** 4:1 Input 9 to 75 VDC 2:1 or 4:1 Input 9 to 75 VDC 3.3 to 15 VDC adjust.

Medical safety approval 2:1 or 4:1 Input 9 to 75 VDC **TRI 20** 4200 VAC I/O-isolation rated for 1000 Vrms working voltage 3.3 to 48 VDC adjust. Remote On/Off 2:1 Input 9 to 75 VDC 5.1 to 24 VDC ■ EN 55032 class A filter 2"×1" ■ EN 55032 1" × 1" class A filter ■ 2"×1" **20 WATT** THR 20WI **20 WATT** THN 20WIR **TEN 20WIR 20 WATT NEW** 3000 VAC I/O-isolation (reinforced) Railway approval Railway approval 4:1 Input 9 to 160 VDC 4:1 Input 9 to 160 VDC ■ EN 55032 class A filter 5 to 24 VDC 3.3 to 24 VDC adjust. 4:1 Input 9 to 160 VDC ■ Increased EMC 3.3 to 15 VDC adjust. ■ EN 55032 class A filter immunity Increased EMC ■ 2"×1" ■ 1"×1" immunity ■ 2"×1" **20 WATT** TEN 20WIRH **20 WATT** ⊕ THM 20(WI) **20 WATT TMDC 20 NEW** Railway approval Medical safety approval Chassis/DIN-rail 4:1 Input 36 to 160 VDC 2:1 or 4:1 Input 9 to 75 VDC Screw terminal 5.1 to 24 VDC 5.0 to 24 VDC connection 4:1 Input 9 to 75 VDC Reinforced Isolation ■ EN 55032 class A filter 5.1 to 48 VDC ■ 1.6"×1" EN 55032 class A filter 1.6" × 1" ■ 3.8"×2.1"× 0.9" TMDC 20H **20 WATT TEQ 20WIR 25 WATT THL 25(WI)** 2:1 or 4:1 Input 9 to 75 VDC Railway approval 3.3 to 15 VDC adjust. ■ EN 55032 class B filter connection Remote On/Off









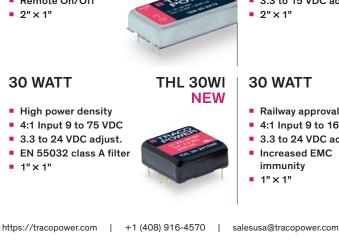
⊕ THM 15(WI)







12





40 WATT TEN 40(WI) **40 WATT TEN 40(WI)E 40 WATT** With triple output models 2:1 or 4:1Input 9 to 75 VDC 3000 VAC I/O-isolation (reinforced) 2:1 or 4:1 Input 9 to 75 VDC 3.3 to 24 VDC adjust. 4:1 Input 36 to 160 VDC 3.3 to 15 VDC adjust. Maximized quality 5 to 24 VDC in a cost efficient ■ 2"×1" Sense lines design 2"×2" Remote On/Off ■ 2"×1" **40 WATT ■ TEN 40WIR 40 WATT TEN 40WIRH** 40 WATT TEQ 40WIR **NEW** Railway approval Railway approval Railway approval ■ EN 55032 4:1 Input 9 to 160 VDC 4:1 Input 36 to 160 VDC 3.3 to 48 VDC adjust. 5.1 to 24 VDC class B filter 4:1 Input 9.5 to 160 VDC Increased EMC Reinforced Isolation 5.0 to 24 VDC adjust. immunity ■ 2"×1" ■ 2"×1" Increased EMC immunity ■ 4.1" × 2.3" × 1" **40 WATT TMDC 40 40 WATT** TMDC 40H **50 WATT** Chassis/DIN-rail Chassis/DIN-rail 2:1 or 4:1 Input 9 to 75 VDC Screw terminal connection Screw terminal connection 3.3 to 24 VDC adjust. 4:1 Input 9 to 75 VDC 2:1 Input 80 to 160 VDC Over temperature protection 5.1 to 48 VDC 5.1 to 48 VDC ■ EN 55032 class A filter Remote On/Off EN 55032 class A filter ■ 4.4"×2.5"×1" ■ 4.4"×2.5"×1" ■ 2"×1" **TEN 60(WI)N 60 WATT 60 WATT** ☐ TEN 60WIR **60 WATT**





THM 60WI Medical safety approval ■ 2×MOPP 4:1 Input 9 to 75 VDC 5.0 to 24 VDC adjust. ■ 2.3"×1.45"×0.5"



High Power DC/DC Converters / RIA12 Surge Filters

40-300 Watt

THR 40WI **NEW**

TEN 50(WI)

NEW

- Excellent thermal management
- EN 55032 class A (chassis models)
- Increased EMC immunity
- Entire protective structure
- Control functions
- Wide selection of options

- RIA 12, NF F01-510 Surge Filter
- Clamps overvoltage transients (up to 385 VDC) at 168 VDC
- Wide input 43 to 160 VDC
- Brownout voltage 36 VDC min.

0-300 WATT

■ DIP-24 or 1.6" × 1"

13



TFI

- **40 WATT**
- Railway approval Ultra wide 12:1 Input
- 9 to 160 VDC
- 5 to 53 VDC adjust.
- PCB mount
- 2.3" × 1.45" × 0.5"



TEP 40UIR

60 WATT

- Railway approval
- Ultra wide 12:1 Input 9 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.3" × 1.45" × 0.5"



I TEP 60UIR

SPECIALIZED

Hazardous Environment ATEX 94/9/EC or HAZLOC



A Household Appliance EN 60335-1 Approved

75 WATT ■ TEP 75WI 100 WATT TEP 100 100 WATT TEP 100UIR Railway approval 2:1 Input 9 to 75 VDC Railway approval 3.3 to 48 VDC adjust. Ultra wide 12:1 Input 4:1 Input 9 to 160 VDC 9 to 160 VDC PCB / chassis / 5.0 to 48 VDC adjust. 5 to 53 VDC DIN-rail PCB / chassis / $2.4" \times 2.3" \times 0.5"$ PCB mount DIN-rail ■ 2.4"×2.3"×0.5" ■ 2.3"×1.45"×0.5" **■ TEP 100WIR 100 WATT 100 WATT** ■ TEQ 100WIR **150 WATT TEP 150WI** Railway approval CV/CC for battery charging Railway approval 4:1 Input 9.0 to 160 VDC 85°C full load operation Railway approval 5.0 to 48 VDC adust. 4:1 Input 10.0 to 160 VDC 4:1 Input 9 to 160 VDC PCB/chassis/ 12 to 48 VDC adust. 12 to 48 VDC adust. DIN-rail UL 508 approval ■ EN 55032 ■ 2.4"×2.3"×0.5" class B (opt.) 3" × 4" × 3.5" ■ 98×65×38 mm **TEP 160 150 WATT ■ TEP 150UIR 160 WATT 160 WATT NEW** Railway approval 2:1 Input 16.5 to 75 VDC Railway approval Ultra wide 10:1 Input 16 to 160 VDC 12 to 53 VDC adust. 4:1 Input 9.0 to 160 VDC 5 to 53 VDC PCB/chassis/DIN-rail 12 to 53 VDC adust. PCB/chassis/ Soft start PCB mount DIN-rail ■ 2.4" × 2.3" × 0.5" ■ 2.4"×2.3"×0.5" ■ 2.4" × 2.3" × 0.5" **160 WATT TEQ 160WIR 200 WATT TEP 200WIR 200 WATT** Railway approval Railway approval Railway approval ■ 75°C full load operation 4:1 Input 9.0 to 160 VDC Ultra wide 10:1 Input 16 to 160 VDC 4:1 Input 19 to 160 VDC 12 to 53 VDC adust. 5 to 53 VDC 12 to 48 VDC adust. Chassis mount/PCB PCB mount UL 508 approval DIN-rail mount opt. ■ 2.4" × 2.3" × 0.5" 3" × 4" × 3.5" $2.4" \times 2.3" \times 0.5"$ **200 WATT ■ TEQ 200WIR ■ TEQ 300WIR**

Railway approval

- 70°C full load operation
- 4:1 Input 19 to 160 VDC
- 12 to 48 VDC adust.
- UL 508 approval

■ 3"×4"×3.5"



300 WATT

CV / CC for battery charging

- Railway approval
- 4:1 Input 18 to 160 VDC 12 to 48 VDC adust.
- UL 508 approval
- Load share function
- 6" × 4" × 1.5"



NEW



■ TEP 160WIR



TEP 200UIR NEW



Industrial DIN-Rail Mount DC/DC Converters

20-300 Watt

- DC/DC modules designed for DIN-Rail mount
- DC/DC modules with optional mounting kit for DIN-Rail mount

24-60 WATT

TCL-DC

20-60 WATT

TMDC Series

Mounting kit for Modules TMDC 20 TMDC 40 TMDC 60



20-300 WATT

TEQ Series models (not on picture: TEQ 20WIR, **TEQ 40WIR** and TEQ 300WIR)

TEQ Series

- Slim plastic casing
- UL 508 approval 4:1 Input 9.5
- to 75 VDC 5.0 to 24 VDC
- EN 55032 class B filter
- 75 × 100 × 27/45 mm

Industrial High Power Converters

150 Watt-40 kW / 45 kVA

- DC/DC & AC/DC converters up to 40 kW
- DC/AC inverters up to 45 kVA
- AC/AC static switches up to 10 kVA
- Eurocassette, 19" Plug-in Modules, wall/chassis mount or DIN-Rail mount
- IEC/EN/UL 62368-1 approvals
- Modular options and customised solutions

150-5000 WATT

19" plug-in /chassis / DIN

- 5 to 400 VDC
- Input 10 to 800 VDC or AC input
- Entire protection circuit
- Individual power solutions



TSC

5-40 kW

- 19" sub rack
- 5 to 800 VDC
- Input 40 to 800 VDC or AC input
- Entire protection circuit
- Individual power solutions



TSC 19

200 VA-45 kVA

- AC output with true sine wave
- Single and three phase
- 10 to 800 VDC input models
- AC input for frequency conversion
- Configurable for individual power solutions



TSD

Encapsulated AC/DC Power Modules

3-100 Watt

- Universal input (85-264 VAC)
- EN 55032 class B filter
- ErP ready

- IEC/EN/UL 62368-1 approvals
- Start-up temperature -40°C for several series

3 WATT

↑ TMPS 03

- PCB mount
- EN 60335-1 (household) 3.3 to 24 VDC
- 1"×1"×0.6"



4 WATT

- PCB mount
- 3.3 to 24 VDC
- Single and dual
- Compact design



TMLM 04

5 WATT

- PCB mount
- EN 60335-1 (household)
- 3.3 to 48 VDC
- 1"×1"×0.6"



TMPS 05

5 WATT

↑ TMPW 5

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 3.3 to 24 VDC
- 1.45" × 1.08" × 0.7"



5 WATT

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 3.3 to 24 VDC
- 2.17" × 1.08" × 0.91'



↑ TMPW 5-J

7 WATT

TMB 07

- **NEW** under development Extended DC input 90 to 370 VDC
- EN 60335-1 (household)
- PCB mount
- 5.1 to 48 VDC output
- 1.52"×1"×0.66"



7 WATT

TMB 07-J

NEW under development

Extended DC input 90 to 370 VDC

Extended input 90 to 305 VAC EN 60335-1 (household)

- EN 60335-1 (household) Chassis mount
- 5.1 to 48 VDC output
- 2.4" × 1.2" × 0.74"



10 WATT



10 WATT

↑ TMPW 10

- PCB mount
- Inc. EMC immunity
- EN 60335-1 (household)
- 3.3 to 48 VDC
- Ultra-compact design 1.5" × 1" × 0.6"



- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5 to 24 VDC
- 1.45" × 1.08" × 0.8"



10 WATT

Chassis mount

■ 2.17" × 1.08" × 0.91"

5 to 24 VDC

↑ TMPW 10-J

15 WATT

TMB 15

NEW under development

- Extended DC input 90 to 370 VDC
- EN 60335-1 (household)
- PCB mount
- 5.1 to 48 VDC output
- 2.06" × 1.07" × 0.93"



15 WATT

TMB 15-J

NEW under development Extended DC input 90 to 370 VDC

- EN 60335-1 (household)
- Chassis mount
- 5.1 to 48 VDC output
- 2.89" × 1.18" × 0.91



15

15 WATT **↑** TMPS 15 15 WATT **↑** ⊕ TPP 15-J **NEW** PCB mount Medical safety approval Inc. EMC immunity Chassis mount with JST connectors EN 60335-1 (household) 3.3 to 48 VDC 3.3 to 48 VDC ■ EN 60335-1 ■ 2.06" × 1.07" × 0.93" ■ 2.82" × 1.14" × 0.82" 4-24 WATT TIW **25 WATT**

PCB mount

30 WATT

PCB mount

30 WATT

3.3 to 48 VDC

2.89" × 1.5" × 1.0"

5.0 to 48 VDC (adj.)

Protection class II

IST connection

50 WATT

■ 4.3"×2.2"×1.2"

20-40 WATT

Single, dual, triple

Protection class II

3.3 to 24 VDC

for TML 40

EN 60335-1

40 WATT

■ 5.1 to 48 VDC output

■ 2.52"×1.77"×0.94"

TMF

5.1 to 24 VDC

2.07" × 1.08" × 0.9"

IP67 casing w. flying leads

Fire safety for furniture

■ EN 60335-1

(household)

3.3 to 24 VDC

5-30 WATT

PCB mount

5 to 24 VDC Single output

30 WATT

Mount in flush boxes

Medical safety approval

Highest power density

Medical safety approval

Chassis mount with

JST connectors

3.3 to 48 VDC

JST connection

3.95" × 1.5" × 1.0"

■ EN 60335-1

40 WATT

■ 5.0 to 48 VDC

■ PCB mount

50 WATT

PCB mount

12 to 24 VDC

■ 2.92" × 1.85" × 0.9"

15-60 WATT

Chassis mount

5.0 to 48 VDC

Ind. EMC immunity

Single, dual, triple

 UL 508 approval DIN-Rail clip

Protection class II

■ 3.2" × 2.2" × 1.2"

Fully encapsulated





• TPP 40E-D

NEW

↑ TPP 30-J



















24-60 WATT

TMM-C

60 WATT

TMB 60

60 WATT

TMB 60-J

- Chassis mount
- Fully encapsulated
- Low profile
- 5.0 to 48 VDC
- Single / dual output
- UL 508 approval
- DIN-Rail clip



NEW under development Extended DC input 90 to 370 VDC

EN 60335-1 (household)

- PCB mount
- 5.1 to 48 VDC output
- 3.0"×2.13"×1.1"



NEW under development Extended DC input 90 to 370 VDC

- EN 60335-1 (household)
- Chassis mount
- 5.1 to 48 VDC output
- 3.86" × 2.20" × 1.0"



TML 100C

65 WATT

TPP 65E-D NEW

- Medical safety approval
- 5.0 to 48 VDC
- Protection class II
- PCB mount
- 3.2"×2.2"×1.2"



65 WATT

TPP 65E-J **NEW**

- Medical safety approval
- 5.0 to 48 VDC (adj.)
- Protection class II
- JST connection
- 4.3" × 2.2" × 1.2"



100 WATT

- Chassis mount
- Active PFC
- 12 to 48 VDC
- 140×60×37 mm



Metal Enclosure and Open Frame Power Supplies

15-960 Watt

- Excellent thermal management
- Universal input (85-264 VAC)
- EN 61000-3-2 compliant
- IEC/EN/UL 62368-1 approvals
- EN 55032 class B filter
- ErP readv

15 WATT

♠ ⊕ TPP 15A-J

- Medical safety approval Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- JST connection
- 2.6" × 1" × 0.73"



15 WATT

- **♠ ⊕** TPP 15A-D
- Medical safety approval Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- PCB mount
- 1.5"×1"×0.82"



15-200 WATT

- Cost optimized design
- Fanless operation
- 3.3 to 48 VDC adjust



TXM

25-750 WATT

- 3.3 to 48 VDC adjust.
- Single, dual, triple
- Screw terminal block



TXL 18-960 WATT

- 3.3 to 48 VDC adjust. Single, dual, triple
- < 200 Watt fanless</p>
- Active PFC > 0.95 Screw terminal block

TXLN NEW

30 WATT

- Ultra compact
- Peak power up to 40 Watt
- 3.3 to 53 VDC
- JST connection
- 3.34" × 1.36" × 0.8



TPI 30A-J

NEW

30 WATT

- ♣ ⊕ TPP 30A-J
- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- JST connection 3.34" × 1.36" × 0.88



30 WATT

★ ⊕ TPP 30A-D

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1 PCB mount
- 2.74" × 1.36" × 0.95"



TPI 50A-J

NEW

40 WATT

Medical safety approval

- 5.0 to 48 VDC adjust.
- Protection class I & II
- JST connection
- 3"×2"×1.05"



TXH 060

TPP 40A

40 WATT

- **TPP 40**
- Medical safety approval
- 5.0 to 24 VDC adjust.
- Protection class I & II
- Opt.: DIN-rail, pin con.



50 WATT

- Ultra compact Peak power up to 70 Watt
- 5.0 to 48 VDC

Protection class II

JST connection ■ 3"×1.5"×1.2"



60 WATT

5.0 to 48 VDC (adj.)

- 3"×1.7"
- Screw terminals



- Single, dual, triple
- 3.5"×2.4"×1.3" mm



SPECIALIZED PRODUCTS:

Hazardous Environment ATEX 94/9/EC or HAZLOC



Railway & Ruggedized EN 50155 Approved

TPI 65A-J

65 WATT

• TPP 65A

65 WATT

TPP 65

- Ultra compact
- Peak power up to 90 Watt
- 5.0 to 53 VDC
- Protection class I&II
- JST connection
- 3"×2"×1.1"



- Medical safety approval
- 5.0 to 48 VDC (adj.)
- Protection class I&II
- JST connection
- 3"×2"×1.1"



- Medical safety approval
- 5.0 to 24 VDC (adj.)
- Single, dual, triple
- Protection class I&II
- 3.5"×2.5"×1.3"
- Opt.: DIN-rail, pin con.



TPI 100A

100 WATT

TOP 100

- 5.0 to 48 VDC (adj.) Protection class I&II
- Pin connection
- 4"×2"×1.2"



100 WATT

- 5.0 to 48 VDC (adj.)
- Protection class I&II
- Pin connection
- $4.5" \times 2.5" \times 1.5"$



TOP 100C

100 WATT

12 to 48 VDC (adj.)

- Protection class I&II
- 3"×2"×1.3"
- Opt.: Casing



TPI 125A-J

100 WATT

Medical safety approval

12 to 48 VDC (adj.)

IST connection

Protection class I&II

TPP 100A

- **100 WATT**
- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I&II
- 3.6"×2.4"×1.5"
- Opt.: DIN-rail, pin con.



TPP 100

125 WATT

Ultra compact Peak power up to 150 Watt

- 5.0 to 48 VDC
- Protection class II JST connection
- 3"×2"×1.2"



■ 3"×2"×1.3"

150 WATT TPI 150A

- 12 to 48 VDC (adj.)
- Protection class II
- 4"×2"×1.3" (opt. casing)
- JST connection



TPI 180A-M

NEW

150 WATT

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I&II
- $4" \times 2" \times 1.3"$



TPP 150A

150 WATT

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I&II
- 4.6"×2.4"×1.9"
- Opt.: DIN-rail, pin con



NEW

TPP 150

180 WATT

- Ultra compact design
- 12 to 48 VDC (adj.) Protection class I & II
- Contr. & monitor signals
- 3"×2"×1.3"



180 WATT

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 3.6"×2.44"×1.5"



TPI 180-M

NEW

- Medical safety approval Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 3"×2"×1.3"

180 WATT



TOP 200

TPP 180A-M

180 WATT

⊕ TPP 180-M **NEW**

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II Contr. & monitor signals
- 3.6"×2.44"×1.5"



120-480 WATT

- 12 to 48 VDC (adj.)
- Compact low profile
- Screw terminals



TPP 250A

TXH

200 WATT 12 to 48 VDC

- Protection class I&II
- Remote On/Off
- 5"×3"×1.3"



200 WATT

- 12 to 48 VDC
- Protection class I&II
- Remote On/Off
- 5.5" × 3.5" × 1.5"



TOP 200C

250 WATT

NEW under development

- Medical safety approval
- Ultra compact design 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4" × 2"



250 WATT

NEW under development

- Medical safety approval
- With Fan-Kit 12 to 48 VDC (adj.)
- Protection class I&II Contr. & monitor
- signals ■ 4"×2"



TPI 300L-M NEW

Ultra compact design

- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4.6"×2.4"×1.56"



300 WATT

TPP 300-M NEW

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4.6"×2.4"×2.32"



TPP 600A 600 WATT

- **NEW** under development
- Medical safety approval
- 24 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5"×3"×1.5"



850 WATT

TPP 850A-FK

- Medical safety approval
- With Fan-Aseembly
- 24 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals6" × 4" × 2.5"



300 WATT

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4.6"×2.4"×2.32"



TPP 450BA 450 WATT

- Medical safety approval
- 12 to 53 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5"×3"×1.6"
- 12 VDC auxiliary output for fan

TPP 600A-FK **600 WATT**

- **NEW** under development Medical safety approval
- With Fan-Assembly
- 24 to 48 VDC (adj.)
- Protection class I&II
- Contr.& monitor signals
- 5"×3"×2.5"



TPI 300-M

300 WATT

TPP 300A-M NEW

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4"×2"×1.3"



TPP 450

450 WATT

Medical safety approval

- 12 to 53 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 5.8"×3.2"×1.6"
- Fan



850 WATT

TPP 850A **NEW**

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I&I
- Contr. & monitor signals
- 6"×4"×1.5"



Outdoor Power Supply

- Rugged power supplies for harsh audoor environments
- Connection via waterproof I/O plug connectors
- Dust, water (incl. salt water), ice and oil resistant enclosure

120 WATT





- 12/24 VDC output
- Ind. EMC immunity
- Extensive safety approval package (incl. UL 508/ ATEX IEC/EN 61010-1 and more)



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Hazardous Environment ATEX 94/9/EC or HAZLOC



- Universal input (85-264 VAC)
- EN 55032 class B filter

■ 3-Phase input for TSP 3P models

 International safety approval package including IEC/EN/UL 62368-1 and UL 508

15-60 WATT

- Fully encapsulated
- 5.0 to 48 VDC
- Single, dual, triple
- Low profile



TMP-C

15-150 WATT

- Low profile plastic casing
- 5.0 to 24 VDC
- NEC class II (up to 90 W)
- DC-OK signal



TPC

6-90 WATT

- Low profile plastic casing
- 5.0 to 24 VDC
- High efficiency
- ErP-ready
- UL 1310 (NEC class II)
- EN 60335-1 (household)



↑ TBLC

24-240 WATT

- Slim plastic casing
- 5.0 to 48 VDC adjust.
- Screw or spring clamp connection
- DC-OK signal



TCL

30-120 WATT

- Robust plastic casing
- 5.0 to 48 VDC adjust.
- ErP-ready
- DC-OK signal



80-480 WATT

- Rugged metal casing
- Cost optimized design
- 12, 24, 48 VDC output
- High efficiency
- Active PFC
- Alternative side mounting



TSP

TIB

80-480 WATT



- UL HazLoc Class I, division 2 and ATEX certification
- Rugged metal casing
- 12, 24, 48 VDC output
- Cost optimized design
- High efficiency
- Active PFC



TSP-WR

50-480 WATT

- Rugged metal casing
- 12 to 48 VDC adjust.
- IECEx/ATEX
- DC-OK signal



TSPC

TIS

72-600 WATT

- Rugged metal casing
- 12 to 48 VDC adjust.
- ATEX (opt.) approval
- Entire control signals



180-600 WATT

- Rugged metal casing
- 24 VDC adjust
- Wide input ranges 100/230-500 VAC
- Entire control signals



50-600 WATT

- Low profile metal casing
- 12 to 72 VDC adjust
- Int. function modules



- System modules for Charging, Buffering, Powersharing, Redundancy, Oring or Freewheeling
- Modules with battery interfaces providing fully integrated fail save DC power solutions (UPS)
- Solutions for further upgrading TRACO POWER power supplies or function modules

UPS SYSTEM

240 WATT **TSPC** 240UPS

- Power Supply with integrated Battery management module
- 24 VDC output, tightly reg. also in power fail mode
- Use with 12 VDC battery



BATTERY CONTROLLER MODULES

360 WATT TSP-BCMU360

- Universal module
- For 24&48 VDC, tightly reg. also in power fail mode
- Use with 12 VDC battery
- No remote link to PS
- Also for redundant operation



72-600 WATT TSP-BCM

- TSP Series access & module
- For 12, 24, 48 VDC models



240 WATT TIB-BCMU240

NEW under development

- Universal module
- For 24 VDC, tightly reg. also in power fail mode
- Use with 24 VDC battery
- No remote link to PS
- For redundant operation



TSP-BFM

BUFFER MODULE

600 WATT

- Universal module
- For any 24 VDC source
- 120 Ws buffer energy
- No batteries
- No remote link to PS



REDUNDANCY MODULES

600 WATT

TSPC-DCM

- Decoupling module (no signal outputs)
- For 5-28 VDC
- 2 inputs, 25 A max.
- No remote link to PS
- Rugged metal casing

REAL PROPERTY OF THE PARTY OF T

240 WATT

TPC-REM

- TPC series access modules
- Active current sharing
- For 24 or 48 VDC models
- 2 Inputs, 240 W
- DC-OK signal output
- Robust plastic casing



TSP-REM

480 WATT

- Redundancy module
- For 5-60 VDC
- 2 × 5 A-10 A out max.
- No remote link to PS (no signal outputs)
- Slim plastic casing



360-600 WATT

- TSP series access modules
- Active current sharing
- For 24 VDC, 2 inputs
- Alarm signal
- Remote On/Off
- Rugged metal casing



TRACO POWER

Reliable. Available. Now.

2 X 3" OPEN-FRAME FOOTPRINT ITE & MEDICAL SAFETY APPROVALS

Features:

- Industry leading power density
- Open frame & enclosed packages
- Global Medical & ITE safety approvals
- -40°C to +85°C operating temperature
- 220W peak power for 5 seconds



INDUSTRIAL APPLICATIONS

TPI 180 Series











Open Frame Model	Enclosed Model	Output Voltage	Output Current (convection)	Output Current (fan cooled)	Peak Power (5s)	Isolation & Leakage Current
TPI 180-112A-M	TPI 180-112-M	12VDC	12.50A	15.00A	18.34A	
TPI 180-115A-M	TPI 180-115-M	15VDC	10.00A	12.00A	14.67A	3,000VAC Input to Output
TPI 180-124A-M	TPI 180-124-M	24VDC	6.25A	7.50A	9.17A	2,000VAC Input to Case
TPI 180-136A-M	TPI 180-136-M	36VDC	4.17A	5.00A	6.11A	2,000VAC Output to Case
TPI 180-148A-M	TPI 180-148-M	48VDC	3.13A	3.75A	4.58A	<300 μA max
TPI 180-153A-M	TPI 180-153-M	53VDC	2 83A	3.404	/ 15A	

MEDICAL APPLICATIONS

TPP 180 Series













Open Frame Model	Enclosed Model	Output Voltage	Output Current (convection)	Output Current (fan cooled)	Peak Power (5s)	Isolation & Leakage Current 2xMOPP compliant
TPP 180-112A-M	TPP 180-112-M	12VDC	12.50A	15.00A	18.34A	
TPP 180-115A-M	TPP 180-115-M	15VDC	10.00A	12.00A	14.67A	4 000) (40) 1 + + 0- + +
TPP 180-124A-M	TPP 180-124-M	24VDC	6.25A	7.50A	9.17A	4,000VAC Input to Output
TPP 180-136A-M	TPP 180-136-M	36VDC	4.17A	5.00A	6.11A	2,500VAC Input to Case
TPP 180-148A-M	TPP 180-148-M	48VDC	3.13A	3.75A	4.58A	2,500VAC Output to Case
TPP 180-153A-M	TPP 180-153-M	53VDC	2.83A	3.40A	4.15A	<100 μA max

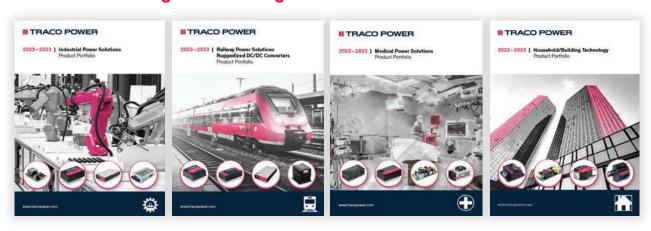
III TRACO POWER

TRACO POWER dedicated to design and production of high quality, state-of-the-art DC / DC & AC / DC power conversion products. Our mission is to provide optimal power supply solutions for specific applications with regard to performance, quality, cost and functionality.

TRACO POWER stocks an average of USD 25+ million in available finished goods inventory for immediate shipment through our distribution partners.

TRACO POWER offers extended product life-cycles, typically 10+ years, and our products are supported by a 3 or 5 year product warranty. We understand our customers require a high quality solution as well as a diverse product offering, availability from stock, extended life-cycles and a strong commitment to quality in the form of extended warranty to support their business.

Our other selection guides / catalogues



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