

## 2021 | DC/DC Converters AC/DC Power Supplies Product Portfolio



## 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](http://www.tracopower.com)

## Icons 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

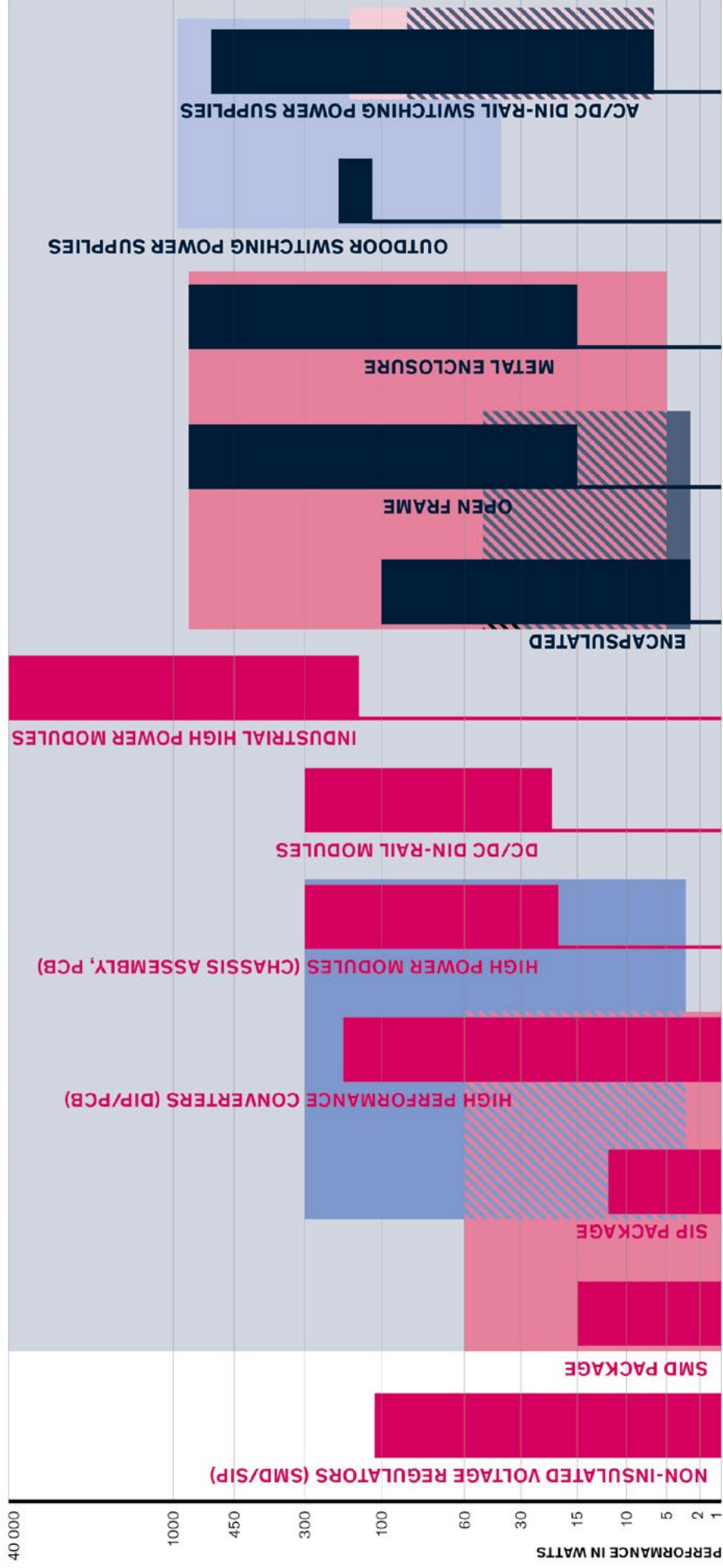


### Building Technology / Household

- Product certification according to IEC/EN 60335-1

DC/DC CONVERTER

AC/DC & DIN RAIL



SPECIAL APPROVALS/TARGET MARKETS

MEDICAL TECHNOLOGY

INDUSTRY/ICT

RAILWAY AND TRANSPORT

HOUSEHOLD

HARSH ENVIRONMENT ATEX

BUILDING TECHNOLOGY

## **DC/DC Converters**

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	1–15 Watt	6–7
SIP DC/DC Converters	1–12 Watt	7–8
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	14

## **AC/DC Power Supplies**

Encapsulated AC/DC Power Modules	3–100 Watt	15–16
Metal Enclosure and Open Frame Power Supplies	15–960 Watt	16–18
Outdoor Power Supply	120 Watt	19

## **DIN-Rail Mount System Solutions**

DIN-Rail Power Supplies	6–600 Watt	19
UPS Systems and Function Modules (DIN-Rail and Industrial Cabinets)	72–600 Watt	20



## Non-Isolated Step Down DC/DC Converters (POL) in SIP 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
- 1.5 to 15 Vout fixed
- LM78xx compatible
- 11.5 × 7.6 × 10.2 mm

## TSR 0.5



## 0.6 AMP

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

## TSR 0.6WI



## 1 AMP

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

## 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  
NEW

## 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



## 1 AMP

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

## TSN 1



## 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

TSR 1.5E  
NEW

## 2 AMP

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

## TSR 2



## 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 3



## 6–30 AMP

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

## TOS



## 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

## TSR 0.5SM



## 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

- +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

## TSRN 1SM



## 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

## 1–15 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 1

- ±10% Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 13.7 × 8.0 × 7.0 mm (single)
- 16.2 × 8.0 × 7.0 mm (dual)



## 1 WATT

## TES 1V

- 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

## TRN 1SM

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



## 1 WATT

## TDN 1WISM

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



## 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



## 2 WATT

## TES 2H

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



## 2 WATT

## TMR 2WISM

- 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



## 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

## TRS 2

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



## 2 WATT

## TES 2M

- 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

## TRN 3SM

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



## 3 WATT

## TDN 3WISM

- 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



## 3 WATT

## TMR 3WISM

- 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



## 3 WATT

## TDR 3(WI)SM

- 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



3.5 WATT

⊕ TIM 3.5SM

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



15 WATT

TON 15(WI)SM

- EN 55032 class A filter
- 2:1 or 4:1 Input. 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- IEC/UL 62368-1
- 27.9 × 23.9 × 8.5 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

TBA 1E

- Unregulated
- Short circuit protection
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6 × 10 mm



1 WATT

TEA 1E  
NEW

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



1 WATT

TMA

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



1 WATT

TBA 1

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



1 WATT

TEA 1  
NEW

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



1 WATT

TME

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



1 WATT

TMV

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



1 WATT

TBA 1HI

- 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



1 WATT

TEA 1HI  
NEW

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



1 WATT

TMV-HI

- 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

TMV-EN

- 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



1 WATT

TRV 1

- Semi regulation (load)
- 3000 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6.1 × 10.2 mm



1 WATT

⊕ TRV 1M

- 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



1 WATT

TRN 1

- Regulated
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 7.7 × 11.0 mm



1 WATT

TMR 1

- Regulated
- 2:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- 17.0 × 7.6 × 11.0 mm



**2 WATT****TMV 2HI**

- Unregulated
- 5200 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 3.3 to 15 VDC
- 19.5 × 7.1 × 10.2 mm

**2 WATT****TBA 2**

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 7.6 × 10.2 mm

**2 WATT****TMH**

- Unregulated
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 7.5 × 10.2 mm

**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

**2 WATT****TMR 2**

- 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****TMR 2WIN**

- Regulated
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- 21.8 × 9.3 × 11.2 mm

**2 WATT**
**⊕ TRV 2M**  
 NEW under development

- Semi regulation
- Medical safety approval (2 × MOPP)
- 5000 VAC I/O-isolation (reinforced)
- $\pm 10\%$  Input 5 to 24 VDC
- 3.3 to 15 VDC
- 19.6 × 9.8 × 12.5 mm

**3 WATT**
**TMU 3**  
 NEW under development

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- 11.5 × 8.6 × 10.2 mm

**3 WATT****TRN 3**

- Regulated
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 7.7 × 11.0 mm

**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 × 11.2 mm

**3 WATT****TMR 3HI**

- 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

**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

**3 WATT**
**TMR 3WIR**

- 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

**4 WATT**
**TMR 4(WI)**  
 NEW

- 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

**6 WATT**
**TMR 6WIR**

- 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

**9 WATT****TMR 9(WI)**

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

**12 WATT**
**TMR 12WI**  
 NEW under development

- Regulated
- 4:1 Input 9 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

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

TDN 1WI



2 WATT

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

TDL 2



2 WATT

- 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

TDR 2(WI)



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)

TEL2



2 WATT

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

THI 2M



2 WATT

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

⊕ TIM 2



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

TDN 3WI



3 WATT

- 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

TDR 3(WI)



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)

TEM 3N



3 WATT

- 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)

TEN 3(WI)N



3 WATT

NEW under development

- 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)

TRI 3



3 WATT

- 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)

THR 3WI NEW



3 WATT

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

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

- 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)

⊕ THM 3(WI)



## 3.5 WATT

⊕ TIM 3.5

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



## 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

TVN 5WI

- Ultra low ripple & noise
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 48 VDC
- EN 55032 class B filter
- Case pin
- DIP-24 (32 × 20.3)



## 5 WATT

TEL 5

- 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

TMDC 06H  
NEW

- 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

TEN 6(WI)N

- 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)



## 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)



## 6 WATT

NEW under development  
TEN 6WIRH

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



## 6 WATT

TRI 6

- 5000 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9.0 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 6 WATT

⊕ THM 6(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
- DIP-24 (32 × 20.3)



## 8 WATT

TEL 8(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.1 × 14)



## 8 WATT

TEN 8

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



## 8 WATT

TEN 8WI

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



## 10 WATT

TEL 10

- Highest power density of 3.83 W/cm<sup>3</sup>
- 2:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 10 WATT

TEL 10WI

- Highest power density of 3.83 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 10 WATT

THD 10(WI)N

- 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

TEN 10WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" × 1"



## 10 WATT

NEW under development  
TEN 10WIRH

- Railway approval
- 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)



## 10 WATT

THR 10WI  
NEW

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



10 WATT

⊕ THM 10(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
- DIP-24 (32 × 20.3)



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



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

TEL 12  
NEW

- Highest power density of 3.61 W/cm<sup>3</sup>
- 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

TEL 12WI  
NEW

- Highest power density of 3.61 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



12 WATT

THD 12(WI)

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



15 WATT

THD 15(WI)N

- 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)



15 WATT

THN 15N

- 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

NEW under development

TEL 15WIN

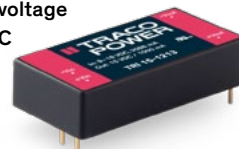
- Highest power density of 4.51 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



15 WATT

TRI 15

- 4200 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- 2" × 1"



15 WATT

THN 15WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 48 VDC adjust.
- Increased EMC immunity
- 1" × 1"



15 WATT

⊕ THM 15(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 1.6" × 1"



20 WATT

THN 20(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- EN 55032 class A filter
- 1" × 1"



20 WATT

TEN 20WIN

- 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 2" × 1"



20 WATT

TRI 20

- 4200 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- 2" × 1"



20 WATT

THR 20WI  
NEW

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



20 WATT

THN 20WIR  
NEW

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" × 1"



20 WATT

THN 20WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 15 VDC adjust.
- Increased EMC immunity
- 2" × 1"



20 WATT

NEW under development

TEN 20WIRH

- Railway approval
- 4:1 Input 36 to 160 VDC
- 5.1 to 24 VDC
- Reinforced Isolation
- 1.6" × 1"





20 WATT

⊕ THM 20(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 1.6" x 1"



20 WATT

TMDC 20

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 3.8" x 2.1" x 0.9"



20 WATT

TMDC 20H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 3.8" x 2.1" x 0.9"



20 WATT

🚂 TEQ 20WIR

- Railway approval
- EN 55032 class B filter
- 4:1 Input 9 to 160 VDC
- 5.0 to 24 VDC adjust.
- Increased EMC immunity
- Temp. range -40 to 93°C
- 4.1" x 2.3" x 1"



25 WATT

THL 25(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 1" x 1"



30 WATT

TEN 30

- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 2" x 1"



30 WATT

TEN 30WIN

- With triple output models
- 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- 2" x 1"



30 WATT

THN 30(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Remote On/Off
- 1" x 1"



30 WATT

NEW under development

THL 30WI

- High power density
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- EN 55032 class A filter
- 1" x 1"



30 WATT

🚂 THN 30WIR  
NEW under development

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" x 1"



30 WATT

⊕ THM 30(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 2" x 1"



40 WATT

TEN 40(WI)

- With triple output models
- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Sense lines
- 2" x 2"



40 WATT

TEN 40(WI)E

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Maximized quality in a cost efficient design
- Remote On/Off
- 2" x 1"



40 WATT

THR 40WI  
NEW

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 36 to 160 VDC
- 5 to 24 VDC
- 2" x 1"



40 WATT

🚂 TEN 40WIR

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 48 VDC adjust.
- Increased EMC immunity
- 2" x 1"



40 WATT

TEN 40WIRH  
NEW under development

- Railway approval
- 4:1 Input 36 to 160 VDC
- 5.1 to 24 VDC
- Reinforced Isolation
- 2" x 1"



40 WATT

🚂 TEQ 40WIR

- Railway approval
- EN 55032 class B filter
- 4:1 Input 9.5 to 160 VDC
- 5.0 to 24 VDC adjust.
- Increased EMC immunity
- 4.1" x 2.3" x 1"



40 WATT

TMDC 40

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.5" x 1"



40 WATT

TMDC 40H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.5" x 1"



50 WATT

TEN 50(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Over temperature protection
- Remote On/Off
- 2" x 1"



60 WATT

TEN 60(WI)N

- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 48 VDC adjust.
- EN 55032 class A filter
- 2" x 1"





60 WATT

TEN 60WIR **NEW**

- Railway approval
- 4:1 Input 9 to 160 VDC
- 5 to 48 VDC adjust.
- Increased EMC immunity
- 2" x 1"



60 WATT

THM 60WI **NEW**

- Medical safety approval
- 2 x MOPP
- 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC adjust.
- 2.3" x 1.45" x 0.5"



60 WATT

TMDC 60

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.7" x 1.5"



60 WATT

TMDC 60H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.7" x 1.5"



High Power DC/DC Converters / RIA12 Surge Filters

40–300 Watt

- Excellent thermal management
- EN 55032 class A (chassis models)

- Increased EMC immunity
- Entire protective structure

- Control functions
- Wide selection of options

0–300 WATT

TFI

- 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.
- DIP-24 or 1.6" x 1"



40 WATT

TEP 40UIR **NEW**

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



60 WATT

TEP 60UIR **NEW**

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



75 WATT

TEP 75WI

- Railway approval
- 4:1 Input 9 to 160 VDC
- 5.0 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" x 2.3" x 0.5"



100 WATT

TEP 100

- 2:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" x 2.3" x 0.5"



100 WATT

TEP 100UIR **NEW under development**

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



100 WATT

TEP 100WIR

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 5.0 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" x 2.3" x 0.5"



100 WATT

TEQ 100WIR

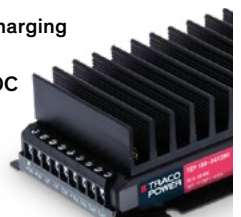
- Railway approval
- 85°C full load operation
- 4:1 Input 10.0 to 160 VDC
- 12 to 48 VDC adjust.
- UL 508 approval
- 3" x 4" x 3.5"



150 WATT

TEP 150WI

- CV/CC for battery charging
- Railway approval
- 4:1 Input 9 to 160 VDC
- 12 to 48 VDC adjust.
- EN 55032 class B (opt.)
- 98 x 65 x 38 mm



150 WATT

TEP 150UIR **NEW under development**

- Railway approval
- Ultra wide 10:1 Input 16 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.4" x 2.3" x 0.5"



160 WATT

TEP 160

- 2:1 Input 16.5 to 75 VDC
- 12 to 53 VDC adjust.
- PCB / chassis / DIN-rail
- Soft start
- 2.4" x 2.3" x 0.5"



160 WATT

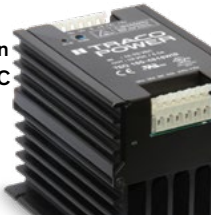
TEP 160WIR

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 12 to 53 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" x 2.3" x 0.5"



**160 WATT**  **TEQ 160WIR**

- Railway approval
- 75°C full load operation
- 4:1 Input 19 to 160 VDC
- 12 to 48 VDC adust.
- UL 508 approval
- 3" x 4" x 3.5"



**200 WATT**  **TEP 200WIR**

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 12 to 53 VDC adust.
- Chassis mount / PCB
- DIN-rail mount opt.
- 2.4" x 2.3" x 0.5"



**200 WATT**  **TEP 200UIR**

**NEW** under development

- Railway approval
- Ultra wide 10:1 Input 16 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.4" x 2.3" x 0.5"



**200 WATT**  **TEQ 200WIR**

- Railway approval
- 70°C full load operation
- 4:1 Input 19 to 160 VDC
- 12 to 48 VDC adust.
- UL 508 approval
- 3" x 4" x 3.5"



**300 WATT**  **TEQ 300WIR**

- 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" x 4" x 1.5"



**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**

- 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 x 100 x 27/45 mm



**20–60 WATT** **TMDC Series**

- Mounting kit for Modules
- TMDC 20
- TMDC 40
- TMDC 60



**20–300 WATT** **TEQ Series**

- Mounting kit for all TEQ Series models (not on picture: TEQ 20WIR, TEQ 40WIR and TEQ 300WIR)



**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** **TSC**

- 19" plug-in /chassis / DIN
- 5 to 400 VDC
- Input 10 to 800 VDC or AC input
- Entire protection circuit
- Individual power solutions



**5–40 kW** **TSC 19**

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



**200 VA–45 kVA** **TSD**

- 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



## 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" x 1" x 0.6"



5 WATT

 **TMPS 05**

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



5 WATT

 **TMPW 5**  
**NEW**

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



4 WATT

**TMLM 04**

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



5 WATT

 **TMPW 5-J**  
**NEW**

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



10 WATT

 **TMPS 10**

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



10 WATT

 **TMPW 10**  
**NEW**

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



10 WATT

 **TMPW 10-J**  
**NEW**

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



15 WATT

 **TMPS 15**  
**NEW**

- PCB mount
- Inc. EMC immunity
- EN 60335-1 (household)
- 3.3 to 48 VDC
- 2.06" x 1.07" x 0.93"



15 WATT

  **TPP 15-J**

- Medical safety approval
- Chassis mount with  
JST connectors
- 3.3 to 48 VDC
- EN 60335-1
- 2.82" x 1.14" x 0.82"



15 WATT

  **TPP 15-D**

- Medical safety approval
- PCB mount
- 3.3 to 48 VDC
- EN 60335-1
- 1.65" x 1.14" x 0.85"



4–24 WATT

   **TIW**

- IP67 casing w. flying leads
- Fire safety for furniture
- EN 60335-1 (household)
- 3.3 to 24 VDC
- Mount in flush boxes



25 WATT

 **TMPW 25**  
**NEW**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5.1 to 24 VDC
- 2.07" x 1.08" x 0.9"



25 WATT

 **TMPW 25-J**  
**NEW**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 5.1 to 24 VDC
- 3.48" x 1.08" x 0.95"



5–30 WATT

  **TMF**

- Medical safety approval
- PCB mount
- Fully encapsulated
- Highest power density
- 5 to 24 VDC
- Single output



30 WATT

  **TPP 30-J**

- Medical safety approval
- Chassis mount with  
JST connectors
- 3.3 to 48 VDC
- EN 60335-1
- JST connection
- 3.95" x 1.5" x 1.0"



30 WATT

  **TPP 30-D**

- Medical safety approval
- PCB mount, through-hole
- 3.3 to 48 VDC
- EN 60335-1
- 2.89" x 1.5" x 1.0"

24–36 WATT     **TMW**  
**NEW under development**

- Medical safety approval
- IP68 casing w. flying leads
- Mount in flush boxes
- Fire safety for furniture
- EN 60335-1 (household)
- 5 to 24 VDC





**40 WATT**    **+** **TPP 40E-D**  
**NEW under development**

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



**40 WATT**    **+** **TPP 40E-J**  
**NEW under development**

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



**7-50 WATT**    **TMG**

- PCB mount
- Compact design
- 3.3 to 48 VDC
- Safety class II prepared



**50 WATT**    **⌆** **TMPW 50**  
**NEW**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 12 to 24 VDC
- 2.92" x 1.85" x 0.9"



**50 WATT**    **⌆** **TMPW 50-J**  
**NEW**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 12 to 24 VDC
- 3.81" x 1.85" x 1"



**7-60 WATT**    **TMP**

- PCB mount
- Industr. EMC immunity
- 3.3 to 48 VDC
- Single, dual, triple



**15-60 WATT**    **TMP-C**

- Chassis mount
- Ind. EMC immunity
- 5.0 to 48 VDC
- Single, dual, triple
- UL 508 approval
- DIN-Rail clip



**20-40 WATT**    **TML**

- PCB/chassis
- Single, dual, triple
- 3.3 to 24 VDC
- Protection class II for TML 40



**24-60 WATT**    **TMM**

- PCB mount
- Fully encapsulated
- Low profile
- 5.0 to 48 VDC



**24-60 WATT**    **TMM-C**

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



**65 WATT**    **+** **TPP 65E-D**  
**NEW under development**

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



**65 WATT**    **+** **TPP 65E-J**  
**NEW under development**

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



**100 WATT**    **TML 100C**

- Chassis mount
- Active PFC
- 12 to 48 VDC
- 140 x 60 x 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 ready

**15 WATT**    **⌆** **+** **TPP 15A-J**

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



**15 WATT**    **⌆** **+** **TPP 15A-D**

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- PCB mount
- 1.5" x 1" x 0.82"



**15-200 WATT**    **TXM**

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





25-750 WATT

TXL

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



18-960 WATT

NEW under development

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



30 WATT

- Ultra compact
- Peak power up to 40 Watt
- 3.3 to 53 VDC
- JST connection
- 3.34" x 1.36" x 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" x 1.36" x 0.88"



30 WATT

TPP 30A-D

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



40 WATT

TPP 40A

- Medical safety approval
- 5.0 to 48 VDC adjust.
- Protection class I & II
- JST connection
- 3" x 2" x 1.05"



40 WATT

TPP 40

- Medical safety approval
- 5.0 to 24 VDC adjust.
- Single, dual, triple
- Protection class I & II
- 3.5" x 2.4" x 1.3" mm
- Opt.: DIN-rail, pin con.



50 WATT

TPI 50A-J

NEW under development

- Ultra compact
- Peak power up to 70 Watt
- 5.0 to 48 VDC
- Protection class II
- JST connection
- 3" x 1.5" x 1.2"



60 WATT

TXH 060

- 5.0 to 48 VDC (adj.)
- 3" x 1.7"
- Screw terminals



65 WATT

TPI 65A-J  
NEW

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



65 WATT

TPP 65A

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



65 WATT

TPP 65

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



100 WATT

TOP 100

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



100 WATT

TOP 100C

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



100 WATT

TPI 100A

- 12 to 48 VDC (adj.)
- Protection class I & II
- 3" x 2" x 1.3"
- Opt.: Casing



100 WATT

TPP 100A

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I & II
- JST connection
- 3" x 2" x 1.3"



100 WATT

TPP 100

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



125 WATT

TPI 125A-J  
NEW

- Ultra compact
- Peak power up to 150 Watt
- 5.0 to 48 VDC
- Protection class II
- JST connection
- 3" x 2" x 1.2"



150 WATT

TPI 150A

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



150 WATT

TPP 150A

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



150 WATT

TPP 150

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



180 WATT

TPI 180A-M

**NEW** under development

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



180 WATT

TPI 180-M

**NEW** under development

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



180 WATT

⊕ TPP 180A-M

**NEW** under development

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



180 WATT

⊕ TPP 180-M

**NEW** under development

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



120–480 WATT

TXH

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



200 WATT

TOP 200

- 12 to 48 VDC
- Protection class I&II
- Remote On/Off
- 5" x 3" x 1.3"



200 WATT

TOP 200C

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



250 WATT

⊕ TPP 250A

**NEW** under development

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



250 WATT

⊕ TPP 250A-FK

**NEW** under development

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



300 WATT

TPI 300A-M

**NEW** under development

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



300 WATT

TPI 300-M

**NEW** under development

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4.6" x 2.4" x 1.9"



300 WATT

⊕ TPP 300A-M

**NEW** under development

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



300 WATT

⊕ TPP 300-M

**NEW** under development

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 4.6" x 2.4" x 1.9"



450 WATT

⊕ TPP 450BA

**NEW** class II

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



450 WATT

⊕ TPP 450B

**NEW** class II

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



600 WATT

⊕ TPP 600A

**NEW** under development

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 5" x 3" x 1.5"



600 WATT

⊕ TPP 600A-FK

**NEW** under development

- Medical safety approval
- With Fan-Kit
- 24 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 5" x 3" x 2.5"



850 WATT

⊕ TPP 850A

**NEW** under development

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



850 WATT

⊕ TPP 850A-FK

**NEW** under development

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I&II
- Contr. & monitor signals
- 6" x 4" x 2.5"





## Outdoor Power Supply

- Rugged power supplies for harsh outdoor environments

- Connection via waterproof I/O plug connectors

- Dust, water (incl. salt water), ice and oil resistant enclosure

### 120 WATT

### TEX 120

- IP67 and NEMA 4X rated
- 12/24 VDC output
- Ind. EMC immunity
- Extensive safety approval package (incl. UL 508 / ATEX IEC/EN 61010-1 and more)



## DIN-Rail Power Supplies

## 6–600 Watt

- 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

### TMP-C

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



### 15–150 WATT

### TBL

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



### 6–90 WATT

### TBLC

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



### 24–240 WATT

### TCL

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



### 30–120 WATT

### TPC

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



### 80–480 WATT

### TIB

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



### 80–480 WATT

### TIB-EX

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



### 50–480 WATT

### TSPC

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



### 72–600 WATT

### TSP

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



### 180–600 WATT

### TSP-WR

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



### 50–600 WATT

### TIS

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



**UPS Systems and Function Modules (DIN-Rail and Industrial Cabinets) 72–600 Watt**

- 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



**BUFFER MODULE**

**600 WATT TSP-BFM**

- 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



**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



**480 WATT TCL-REM**

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



**360–600 WATT TSP-REM**

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







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.

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