

TECNED 8 Channel PDU

48 V DC power distribution for telecom systems



8 channels / 1–63 A MCBs / 200 A busbar

The TECNED 8 Channel PDU distributes power from a –48 V DC telecom supply to eight separately protected load circuits. A 200 A busbar and selectable 1–63 A miniature circuit breakers (MCBs) allow each channel to be matched to the connected equipment within a compact 19-inch, 1U enclosure.

Protected distribution in one rack unit

- **Eight protected load channels.** Select MCB ratings from 1 A to 63 A to suit individual DC loads.
- **Plug-in circuit breakers.** Replaceable front-mounted breakers simplify servicing and changes to the channel configuration.
- **Integrated surge protection.** A shared protection circuit helps limit transient overvoltages on the DC supply.
- **Front-access connections.** Input terminals, load connections, alarm contact and earth connection are accessible from the front.
- **Clear local indication.** Colour windows show breaker ON/OFF status; separate indicators identify reversed input polarity and SPD faults.
- **Alarm monitoring.** LED reverse polarity / LED SPD trip + alarm contact

For TECNED telecom power systems

Use the PDU between a compatible DC power source and the connected telecom equipment. It provides an organised distribution point for base stations, access networks and equipment cabinets supplied by rectifier/charger and battery systems.

Select the channel ratings to suit the loads. The combined operating current must remain within the 200 A busbar rating and the limits of the input connections and wiring.

Technical data

Parameter	TECNED 8 Channel PDU
Output channels	8 individually protected DC channels
MCB current range	1–63 A per channel, selected to suit the load
Busbar rating	200 A total
Rated system voltage	–48 V DC
Maximum continuous operating voltage	65 V DC magnitude (manual Uc: –65 V DC)
Input arrangement	One input with two parallel connection ports; 125 A per port, 200 A combined
Circuit-breaker component	BG5, 1P+N, hydraulic-magnetic release; plug-in format
BG5 breaking capacity Icu / Ics	10 kA / 7.5 kA — circuit-breaker component ratings ¹
Input conductor cross-section	6–35 mm ²
Output conductor cross-section	1.5–16 mm ²
Remote alarm conductor cross-section	0.5–2 mm ²
Remote alarm contact	Closed: normal; open: fault
Power and SPD indication	Red: reversed input polarity or SPD fault, respectively; off: normal
Circuit-breaker status window	Red: ON; green: OFF
Rack format / enclosure	19-inch, 1U; Q235 steel
Dimensions W × H × D	482.6 × 43.6 × 170 mm
Ingress protection / installation	IP2X; indoor installation
Operating / storage temperature	–20 to +55 °C / –40 to +70 °C
Relative humidity / atmospheric pressure	10–95% at 25 °C / 70–106 kPa

Surge protection data

Parameter	–48 V to RTN	–48 V to PE	RTN to PE
Nominal discharge current I _n	10 kA	10 kA	20 kA
Maximum discharge current I _{max}	15 kA	15 kA	20 kA
Voltage protection level U _p	300 V	Not stated	Not stated

Standards and product support

Standards and component documentation

Scope	Reference	Documentation
BG5 circuit breaker	EN 60947-2:2017+A1	TÜV Rheinland certificate R 50510032 0001
BG5 circuit breaker	2014/35/EU	TÜV Rheinland conformity certificate AN 50510033 0001

TECNED telecom power solutions

TECNED B.V., based in Balk, the Netherlands, supplies power solutions for telecom, infrastructure and industrial installations. The eight-channel PDU complements rectifier/charger and battery systems with separately protected DC load connections.

The TECNED GR(HS)-T series is a modular, rectifier/charger system designed to meet the modern requirements of Telecommunication, Railways, Data centers, Utility infrastructure, and Industrial applications to power critical systems. Based on hot-swappable plug-in rectifier modules, the GR(HS)-T can be configured from 50 A to 300 A.

Contact TECNED to specify the required MCB ratings, coordinate the total load with the 200 A busbar and input connections, and discuss integration into your telecom cabinet.



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