

QUINT-PS DC to DC Converters

perle.com/products/industrial-power-supply/quint-dc-dc.shtml

Regulated DIN Rail Power Supplies

- Output Voltage: 12, 24 or 48 V DC
- Amps: 5, 8, 10 or 20
- Watts: 96, 120, 240 or 480 W
- Wide DC input voltage ranges of 9 V DC ... 154 V DC

If you need to efficiently produce a regulated output voltage from a source that may or may not be well controlled to a load that may or may not be constant, the QUINT DC/DC Converters are for you. These DC to DC Converters converters provide a regulated DC voltage. They alter the voltage level, regenerate voltages at the end of long cables or enable the creation of independent supply systems by means of electrical isolation. With all required safety certifications to support ITE (Information Technology Equipment), ruggedized packaging, extended operating temperatures, high peak load capabilities and high isolation voltages, the QUINT Industrial DC to DC Converter is designed to meet the needs of your industrial application. QUINT DC to DC converters use leading technologies to increase safety and reliability:

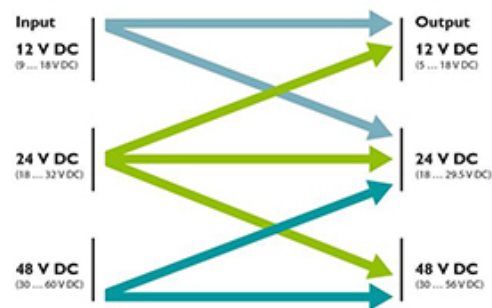


- Preventive function monitoring warns against critical operating states before errors occur.
- The static power reserve enables difficult loads to be started reliably with up to 1.25 times the nominal current (POWER BOOST).
- Fast tripping of standard circuit breakers with up to six times the nominal current for 12 ms (SFB technology).

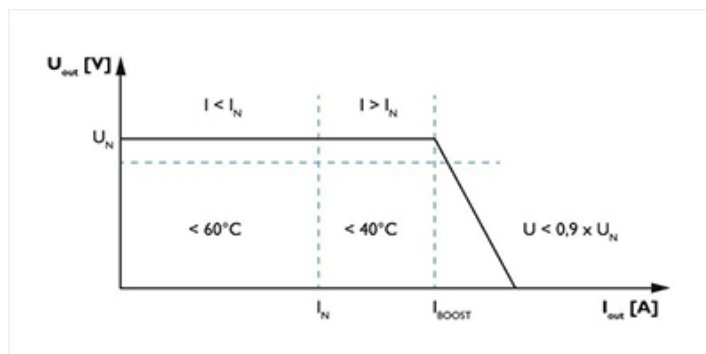
5 to 56 V DC Adjustable Output Voltage Range

Using the rotary potentiometer on the front face of the QUINT power supply, the output voltage can be optimally adjusted to meet specific application environment requirements. For example, you can easily adjust to compensate for a voltage drop caused by a long cable length.

- 12 V DC: 5 to 18 V DC
- 24 V DC: 18 to 29.5 V DC
- 48 V DC: 30 to 56 V DC



POWER BOOST: reliably start difficult loads

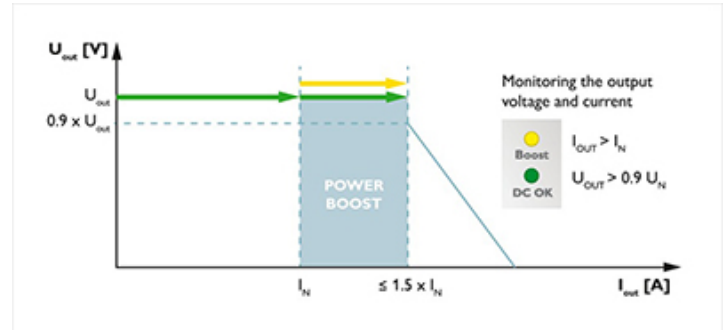


A high degree of flexibility is required to configure, optimize and expand large systems. To optimally adapt a system or machine to your requirements, a power reserve in the power supply unit is crucial. With the QUINT Power Boost function a **static boost will continuously provide up to 125% of the nominal current**. This is useful when it is not possible to predict which loads will be switched on at the same time or high switch-on currents of capacitive loads have to be absorbed without voltage dips.

Preventive function monitoring reports critical operating states before they occur

With a QUINT Industrial Power Supply, the output voltage and output current are constantly monitored. Preventive function monitoring visualizes critical operating states and indicates them locally and remotely to the controller as follows:

- Via LED
- Via floating relay contact
- Via active switching output



For use in Extreme Ambient Conditions

Equipment found in traffic management, oil and gas pipelines, weather tracking, industrial and outdoor applications must function in temperatures that cannot be supported by a commercial power supplies. With an operating temperature of **-25°C to +70°C, and reliable device start-up at -40°C**, the QUINT Industrial Power Supply is ideal for use with equipment subjected to harsh environments and severe temperatures.

High efficiency and low no load power consumption

Compared with other products on the market, the QUINT Industrial Power Supply provides excellent energy savings. With a very low no load power consumption and high efficiency at nominal load, just a small amount of electrical energy is converted into undesired heat energy making these very ECO friendly power supplies.

SFB (Selective Fuse Breaking) Technology

SFB Technology can be used to quickly and reliably trip miniature circuit breakers and fuses connected on the secondary side. In the event of a short circuit on the secondary side, the QUINT supplies up to 6 times the nominal current for 12 ms. Faulty current paths are switched off selectively, the fault is located, and important system parts remain in operation. Loads that are connected in parallel are still supplied with energy ensuring continued operation of these system parts.

- Tripping circuit breakers: The circuit breaker is typically tripped by the high SFB current within 3 to 5 ms. As a result, any voltage dips for loads connected in parallel are avoided.
- Tripping a fuse: Fuses are tripped by melting the predetermined breaking point inside the fuse capsule. The tripping characteristic of the fuse is described by the melting integral (I^2t). A high current is crucial in order to achieve a very short tripping time.














Ideal application environments for a QUINT DIN Rail Power Supply






- Railways: All models have Railway approvals
- machine building
- automated production process
- industrial control, automation, assembly, and test equipment
- building control, security and surveillance, and climate control systems.
- power countless industrial automation devices such as sensors, controllers and valves

Other reasons to choose a QUINT Industrial DC to DC Converter

- Voltage Isolation input/output: 1.5 kV AC
- Protections: Short-circuit, Overload, Over voltage, Over-temperature
- To ensure maximum availability all models have high MTBF (Mean Time Between Failure) values.

Part Number	Product Name	Input Voltage (V DC)	Input Voltage Range (V DC)	Output Voltage (V DC)	Output Voltage Range (V DC)	Output Current (Amps)	Output Power (Watts)	Dimensions (W x H x D)	Additional Features	Detailed Technical Specifications
23201158	QUINT-PS/24DC/12DC/8	24	18 ... 32	12	5 ... 18	8	96	32 x 130 x 125	Shipbuilding Approvals	 View
29050078	QUINT-PS/12DC/12DC/8	12	9 ... 18	12	5 ... 18	8	96	32 x 130 x 125		 View
23200348	QUINT-PS/24DC/24DC/5	24	18 ... 32	24	18 ... 29.5	5	120	32 x 130 x 125	Shipbuilding Approvals	 View
23201318	QUINT-PS/12DC/24DC/5	12	9 ... 18	24	18 ... 29.5	5	120	32 x 130 x 125	Shipbuilding Approvals	 View
23201448	QUINT-PS/48DC/24DC/5	48	30 ... 60	24	18 ... 29.5	5	120	32 x 130 x 125		 View

23205428	QUINT-PS/24DC/24DC/5/CO	24	18 ... 32	24	18 ... 29.5	5	120	32 x 130 x 125	ATEX / IECEx Protective Coating Shipbuilding Approvals	
View										
23200928	QUINT-PS/24DC/24DC/10	24	18 ... 32	24	18 ... 29.5	10	240	48 x 130 x 125	Shipbuilding Approvals	
View										
29050098	QUINT-PS/60-72DC/24DC/10		42 ... 96	24	18 ... 29.5	10	240	48 x 130 x 125		
View										
29050108	QUINT-PS/96-110DC/24DC/10		67.2 ... 154	24	18 ... 29.5	10	240	48 x 130 x 125		
View										
23205558	QUINT-PS/24DC/24DC/10/CO	24	18 ... 32	24	18 ... 29.5	10	240	48 x 130 x 125	ATEX / IECEx Protective Coating Shipbuilding Approvals	
View										
29050118	QUINT-PS/60-72DC/24DC/10/CO		42 ... 96	24	18 ... 29.5	10	240	48 x 130 x 125	Protective Coating Noxious gas	
View										

29050128	QUINT-PS/96-110DC/24DC/10/CO		67.2 ... 154	24	18 ... 29.5	10	240	48 x 130 x 125	Protective Coating Noxious gas	
View										
23201028	QUINT-PS/24DC/24DC/20	24	18 ... 32	24	18 ... 29.5	20	480	82 x 130 x 125	Shipbuilding Approvals	
View										
23205688	QUINT-PS/24DC/24DC/20/CO	24	18 ... 32	24	18 ... 29.5	20	480	82 x 130 x 125	ATEX / IECEx Protective Coating Shipbuilding Approvals	
View										
23201288	QUINT-PS/24DC/48DC/5	24	18 ... 32	24	30 ... 56	5	240	48 x 130 x 125	Shipbuilding Approvals	
View										
29050088	QUINT-PS/48DC/48DC/5	48	30 ... 60	48	30 ... 56	5	240	48 x 130 x 125		
View										