

## Switch Power Pack, Battery Charger, DC-DC-Converter

# RPL 960W Series 960 Watt

input range AC 90V - 264V or DC 120V - 375V



- Special features:**
- output voltage DC 24V, wide range adjustment
  - connection in series and parallel
  - high efficiency
  - compact and robust design in metal housing
  - easy fitting onto DIN-rail, several fitting positions possible
  - protection class I
  - sinusoidal current on input side, active PFC
  - interference emission EN 61000-6-3, EN 55011, EN 55022 (Telecom)
  - interference immunity EN 61000-6-2: ESD, electromagnetic irradiation, burst, conducted interference immunity, line voltage dips
  - overcurrent limiter and short-circuit protection
  - overtemperature protection
  - inrush current limiter, enabling application of conventional circuit breakers
  - overvoltage limiter
  - status display: tricolored LED
  - potential free noise output (change-over switch)
  - input DS (Disable) for remote output switch-on and switch-off
  - all power packs series RPL also apply as **chargers** (type ...WL) or
  - **DC-DC-converters** (reverse polarity protection available on input side)

- Options:**
- Temperature guided charging: additional letter – T. Example RPL 2440WL-T.
  - Overload shut down, storing cut-off at overload: additional letter – D. Example RPL 2440W-D.
  - Analog input DC 0-10V to control output voltage: additional letter – U. Example RPL 2440W-U.
  - Further options (other signal combinations, tropically insulated, increased vibration resistance, etc.) on request.



Technical Data	960W	
	RPL 2440W	RPL 2440WL
<b>INPUT</b>		
Rated voltage, U1nominal	AC 220-240V	
Voltage range, U1min-U1max	AC 90-264V or DC 120V-375V below 190V power decrease 8 Watt/Volt	
Frequency	45-65 Hz or 0Hz	
Overvoltage protection	varistor	
Rated current typical, I1nominal	5,6A at AC 190V, 4,6A at AC 230V	
Highest transient pulse Ta=25°C	< 16,5A at AC 230V	
Highest transient pulse Ta=55°C	< 44A at AC 230V, < 51A at AC 264V	
Internal fuse (instrument fuse)	8AT	
Recommended external fuse	circuit breaker B10, B16	
Maximal switching rate	30 switching cycles per hour	
Mains failure bridging time	> 20ms	
Reverse polarity protection DC-input	yes	
<b>OUTPUT</b>		
	<b>Power pack</b>	<b>Charger</b>
Rated voltage U2nominal	DC 24V	DC 27.4V
Voltage range U2min - U2max	DC 21-28V	
Rated current I2 (at U2nominal) Ta = -25...+55°C	40.0A	35.0A
Overload-, short circuit-, no-load protection	Ja	
Overcurrent limitation typical	40,5A	35,5A
Short circuit current typical	< 45A,	
Overload shut down, storing cut-off at overload. Option ,D'	unit switches off on output side after 4s overcurrent. fault repair: switch off mains, check load and switch on mains again..	
Overvoltage protection	TVS 36V	
Residual ripple f = 20Hz...300 kHz	< 60mV eff.	
Line control U1min - U1max	< 0,05 %	
Load control Load change 10% <-> 90%	< 0,25%	
Overshoot / control time Load leap 10%<->90%	< 3.0% < 3ms	
Temperature stability	< 0,02% / K	
Series- and parallel operation	yes. Series operation up to output voltage DC 150V max.	
<b>SIGNAL DATA</b>		
LED status reports	U2 > 0,9xU2-must value (voltage control): LED green U2 < 0,9xU2-must value (current limitation): LED red unit connected to mains, output voltage switched off: LED yellow	
Input DS (Disable): remote output switch-off / -on	external signal, „+“ to DS, „-“ to -. 10-29V: output OFF, 0-2,5V: output ON	
Noise output (not with option – T) Potential free change-over contact DC24V/0,5A, AC30V/0.1-1A	U2 > 0,9xU2-must value: connection COM-NO U2-actual status < 0,9xU2-must value: connection COM-NC	
Temperature controlled charging, option - T	Connection external NTC-resistor 10k to B=3977K on COM/NO	
<b>REGULATIONS</b>		
Mains harmonics limitation comp. EN 61000-3-2	yes. Active PFC	
Noise emission	EN 61000-6-3, EN 55022	
Noise immunity	EN 61000-6-2	
Safety	EN 60950 Class I	
Test mark / approbation		
Test voltage input / output	AC 3kV (type test), AC 2kV (routine test)	
Test voltage input / housing	AC 2,5kV (type test), AC 2kV (routine test)	
Test voltage output / housing	DC 500V (routine test)	
Humidity	85% RH IEC 68-2-30	
Vibration & shock	ETS 300 019-2-4, class 4M5	
<b>OPERATION SPECIFICS</b>		
Efficiency typical	typical 92% at AC 230V and 100%-load	
Protection comp. VDE 0470/EN60529	IP 20	
Protection class comp. IEC 536, VDE 0106 T1	I	
Overtemperature protection	Yes	
Ambient temperature, 2 cm beneath unit	-25° up to +55°C	
Storage temperature	-40 up to +85°C	
Cooling	natural convection	
Article number	0500-00002440W	0520-00002440WL
<b>MECHANICS</b>		
Housing construction	aluminum	
Assembly	snap onto mounting rail comp. DIN EN 60715	
Installation position	front panel horizontal, connections below	
Measurements W x H x D in mm	approx. 285 x 174 x 110 (mm)	
Weight in kg	approx. 3,3kg	