6+6 Drop-In Radio Pack and Battery Charger Product Specifications

PBT-RPC-66

Overview

This 6+6 Drop-In Radio Pack and Battery Charger is a customized charging station for CrewCom® Radio Packs (RPs) and Pliant rechargeable Li-Poly batteries. When ordering, reference Part Number PBT-RPC-66.

Key Features

- Charge up to six CrewCom Radio Packs and six batteries simultaneously
- Recharge batteries from empty in less than 4 hours
- LED indicators provide real-time charge status
- Radio Pack charging bays compatible with Pliant FleXLR adapter
- Charger bottom designed for cable management
- Region-specific power cable (included)
- Non-Reflective, textured matte finish
- Optional mounting bracket available (not included)
- Full One-Year Parts and Labor Warranty

What's in the Box?

- PBT-RPC-66 — 6+6 Drop-In Radio Pack and Battery Charger
- 00004239 — Power Supply
- PC-PWR-XX (Region Specific) — AC Power Cord
- D0000534 — Operating Guide
- D0000219 — Warranty Extension Registration Card

Accessories

- PAC-PBT-MNT — Mounting Bracket

Specifications*

Input	
Voltage Range	90–264 VAC
Frequency Range	47–63 Hz
Input Current	1.3 A max
Standby Power	1.6 W max
Input Fuse	N/A

Output		
	Per Battery Bay	**Per RP Bay**
Voltage	0–4.2 V	0–5.35 V
Current	0–1 A	0–1.5 A
Power	4.2 W Maximum	8 W Maximum
Voltage Tolerance	± 1%	± 1%
Current Tolerance	± 5%	N/A (controlled by RP)
Leakage Current	<1 mA	<1 mA
Ripple & Noise (3)	<120 mV pk-pk	<120 mV pk-pk
Protection	Over current, Over temperature, Reverse polarity	Over current, Over temperature, Reverse polarity

PBT-RPC-66 Drop-In RP and Battery Charger

Environmental	
Cooling	Convection cooled
Operating Temperature	Supply: -30°C to 70°C (-22°F to 158°F); Battery Charging: 0°C to 45°C (32°F to 113°F)
Non-Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Altitude	-382 m to 2000 m (-1,253 ft. to 6,562 ft.)

Mechanical Details	
Dimensions (Charger) (L×W×H)	394 × 173 × 78 mm (15.5 × 6.8 × 3.1 in.)
Weight (Charger)	1360 g (3 lb)
Dimensions (power supply) (L×W×H)	145 × 60 × 32 mm (5.7 × 2.4 × 1.2 in.)
Weight (power supply)	450 g (1 lb)
Dimensions may vary if device uses optional mounting bracket.	

General	
AC Input Connector	IEC60320 C14 (3-in)
DC Input Connector	L712
DC Cable Length	1 m (3.3 ft.)
Efficiency (Level VI)	>89% at full load
Green Procurement	WEEE2002/96/EC
MTBF	348.7K hrs. min. MIL-HDBK-217F (25°C)
Indicator	Red-green bicolor LED per bay
Battery Temp Monitoring	Read TEMP register (0x07 – 0x06) of BQ27000 in battery pack
Charge Time from Empty	Radio Packs: approx. 4 hours Batteries: approx. 2.5 hours
PCB Visibility	< 0.5 mm (0.020 in.) around perimeter of battery-mating connector
RoHS COMPLIANCE	In compliance with the European Directive 2011/65/EC on the Restriction of Hazardous Substances (RoHS)

Specifications* Continued

Charge Phases and Indicators		
Current Phase	**Description**	**LED Color**
Charging	Normal (constant current constant voltage or "CCCV") charge mode	Solid **Amber**
Charge Complete	Battery is fully charged	Solid **Green**
Fault	No battery communication	Solid **Red**
Extreme Temperature	Over 45 C or under 0 C	Blink **Red**
Standby	No battery inserted	None (LEDs off)
Power On	Charger verification of power at power up	All device LEDs flash once **Red**, **Amber**, and **Green** in sequence
Waiting for Update	Device has successfully connected to CrewWare, but awaiting user action to proceed with firmware update	Blink **Green**
Firmware Update Failure	Device has successfully connected to CrewWare, but previous device update failed. Device recovery required via instructions in Crew-Ware.	None (LEDs off)
Update in Progress	Device firmware update in progress	Solid **Amber**

Charge Termination Methods	
Cutoff	Charge is terminated when the charge current is less than 65 mA at a charging voltage of 4.2 V
Temperature	Charge will not occur if below 0°C (32°F) or above 45°C (113°F)

Compliance	
Safety & EMC	
IEC 60950-1, Edition 2.2	Safety
Emissions	
CISPR 32:2008 with TRF IECCISPR22B	CB Scheme - Radiated Emissions
CISPR 24:2010 with TRF IECCISPR24B	CB Scheme - Immunity Testing
IEC 61000-3-2:2014 with IEC61000_3_2C	CB Scheme - Conducted Emissions
IEC 61000-3-3:2013 with TRF: IEC61000_3_3C	CB Scheme - Voltage Fluctuations and Flicker
AS/NZS CISPR 32	Australia - EMC Testing
VCCI CISPR 32	Japan - EMC Testing
KN 32	South Korea - Radiated Emissions
KN 35	South Korea - Radiated Emissions
EN 61000-3-2:2014	South Korea - Conducted Emissions, Harmonics
EN 61000-3-3:2013	South Korea - Conducted Emissions, Flicker
FCC	
FCC Part 15, Subpart B and ICES-003 Issue 6	Nonintentional Radiated & Conducted Emissions, Class A limits
Supply Immunity	
EN 61000-4-2	Electrostatic discharge (ESD)
EN 61000-4-3	Radio-frequency electromagnetic field
EN 61000-4-4	Electrical fast transients/burst
EN 61000-4-5	Surges
EN 61000-4-6	Conducted high frequency disturbances
EN 61000-4-8	Power-frequency magnetic fields
EN 61000-4-11	Voltage variations, dips and interruptions

Notes

1. Ambient temperature Ta = 20ºC unless otherwise indicated.
2. Load regulation is measured at the battery connector.
3. Measured with a 0.1µF ceramic capacitor and a 47µF Tantalum capacitor across the output terminals.
4. Total regulation tolerance includes initial set accuracy, line and load regulation.
5. Power losses of input and output cables are not considered here.
6. The rms method is used for leakage current measurements.

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*** Notice About Specifications:** While Pliant makes every attempt to maintain the accuracy of the information contained in this document, this information is subject to change without notice. Please check our website for the latest system specifications and certifications.

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