

## ECP-82 Series

### Uninterruptible Power Supply (UPS)



The ECP-82 uninterruptible power supply is built to operate in harsh conditions. It replaces a standard battery box for a variety of transceivers and remote control units. It can also be used in military or civilian vehicles and marine craft or for any general power supply application. The ECP-82 is designed for the BBx590 series of lithium rechargeable batteries. The battery is automatically charged when an AC or DC source is applied to the ECP-82. Short-circuit protection, as well as over-power, over-voltage, and over-temperature protection ensure that the ECP-82 continues to run even after other devices fail.

### FEATURES

Simultaneous Inputs:	Separate AC input and DC input connectors
DC Source Input:	+9 Vdc to +36 Vdc; +120 Vdc to +430 Vdc
AC Source Input:	90 Vac to 305 Vac, 47 Hz to 63 Hz
Single Output:	24 Vdc up to 270 W (regulated)
Load:	No load to 11.25 A (continuous)
Efficiency:	Up to 91%
Internal Battery:	Rechargeable 2590/5590/x390 series
Automatic Switchover:	From AC or DC source to internal battery
Battery Charging:	Automatic when operating from AC or DC sources
Environmental:	Conduction cooling, ruggedized, IP67 (pending)
Operating Temperature:	-25°C to +60°C
EMI/RFI Protection:	Pending (FCC Part 15; IEC/EN 61000-6; AS/NZS 61000.6; EN 55022 Class A; IEC/EN 61000-4; EN 55015 Class B; EN 61547)

### APPLICATIONS

- Suitable for AN/PSC-5/5D, MBMMR, AN/PRC-117F/150/138/113, AN/URC-200, MXF-400 and RF-5000 transceivers, or any other 24 V transceiver with the same form factor.
- Military or civilian vehicles and/or marine craft.
- General power supply applications.

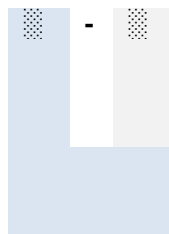
SPECIFICATIONS<sup>1</sup>

		Model	
		ECP-82M	ECP-82C
AC Source Input	AC Connector	3-pin Mil-C circular	IEC
	Input Voltage	90–305 Vac or 120–430 Vdc	
	Input Frequency	47–63 Hz	
	Input Current	0.6 A @ 245 Vac	
	Inrush Current	TBD	TBD
	Input Leakage Current	0.1 A (max)	
	Power Factor	0.96 (at full load, 240 Vac)	
DC Source Input	DC Connector	5-pin Mil C circular	3-pin XLR
	Input Voltage	9–36 Vdc	9–36 Vdc
	Input Current	6.3 A @ 24 Vdc (max)	
	Inrush Current	TBD	TBD
	Input Leakage Current	0.4 A (max)	
	Input Surge Voltage	50 Vdc	
Output	Voltage	24 Vdc $\pm$ 1 Vdc	
	Full Load Current	6.25 A (battery only) / 12.5 A (AC plus DC source)	
	Surge Current	18 A (5 seconds max)	
	Output Power	150 W (battery only) / 270 W (AC plus DC source)	
	Regulation	$\pm$ 1% (AC source) / $\pm$ 0.4% (DC source)	
	Capacitive Load	50000 $\mu$ F (AC source) / 10000 $\mu$ F (DC source)	
	Ripple Noise	100 mVpp (AC source) / 200 mVpp (DC source)	
	Efficiency <sup>2</sup>	91% (AC source) / 85% (DC source or battery)	
	Hold-up Time <sup>3</sup>	9.5 ms (battery only) / 3.3 ms (AC plus DC source)	
Switching Frequency	100 kHz (AC source) / 220–330 kHz (DC source)		
Protection	Over Voltage	Voltage Limiter	
	Over Current	Current Limiter	
	Over Power	Constant Current Mode with Falling Voltage	
	Over Temperature	Thermal Shutdown	
Isolation	Input to Output	3750 Vac / 2250 Vdc	
	Input to Case	1180 Vac / 1600 Vdc	
	Output to Case	500 Vac / 1600 Vdc	
Environmental	Operating Temperature	-25°C to +60°C	
	Storage Temperature	-40°C to +85°C	
Physical	Size / Mass	242 mm X 203 mm X 81 mm / 2.95 kg (without battery)	
	Pressure Relief	3.4 kPa (0.5 PSI) differential breather valve	

<sup>1</sup>Specifications subject to change; <sup>2</sup>At full load; <sup>3</sup>Rated voltage to rated voltage less 2 V.

## ORDERING DETAILS

ECP-82



BK:	Black	DB:	Drab Olive
SD:	Sand	XX:	Unpainted
M:	3-pin Mil-C (shell size 12) for AC source 5-pin Mil-C (shell size 14) for DC source		
C:	IEC connector for AC / 3-pin XLR connector for DC		

## ACCESSORIES

Part Number	Accessory
ECP-82X-ACP/AU	AC power cable (Australia / New Zealand)
ECP-82X-ACP/UK	AC power cable (UK)
ECP-82X-ACP/US	AC power cable (USA, Canada)
ECP-82X-DCP	DC power cable with alligator clips
ECP-82X-OPC	Output power cable with alligator clips