

## 2022 Mains Power Supply

The BARRETT 2022 is a 13.8V DC regulated, 21 Amp power supply capable of operating on AC input voltages from 88VAC to 264VAC without input voltage switching and is designed to power the Barrett 2000 series of HF transceivers and accessories.

The 2022 has connectors to provide power for one 2000 series transceiver plus one 2000 series accessory such as a modem.

The 2022 has a battery standby system comprising a charging circuit with a true automatic no-break changeover, in case of mains power supply failure. This feature eliminates the problems of data modems re-setting during mains failures and requiring re-initialisation. When mains is present the power supply charges the battery at a maximum rate of 3 amps. When the battery is fully charged the rate is reduced to a trickle charge to prevent over charging.

The 2022 power supply incorporates loudspeakers for the 2000 series transceiver when used in a base station configuration. The loudspeaker is automatically connected to the transceiver via the power connector. The power supply is provided with an internal fan allowing operation at a 100% duty cycle for data applications.

The 2022 power supply is supplied with four IEC cord sets that will suit most mains power outlets used throughout the world.

### Specifications

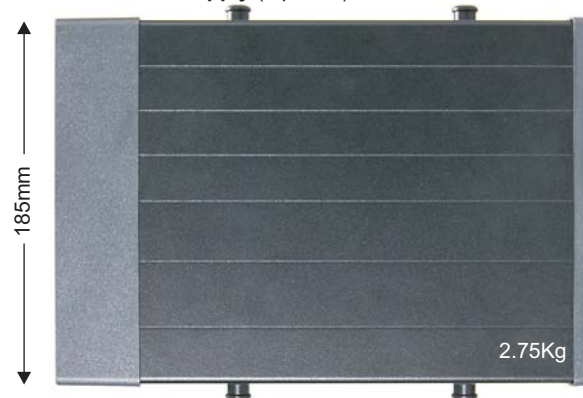
<b>Equipment</b>	BARRETT 2022 mains power supply with no break battery backup charge controller and base station loudspeaker.
<b>Output voltage</b>	13.8V DC
<b>Output current</b>	21 Amps continuous
<b>Input voltage</b>	88 -264 VAC @ 50/60 Hz. Auto-ranging.
<b>Regulation</b>	Less than 1% change at full load
<b>Ripple and noise</b>	Less than 150 mV RMS at full load
<b>Overload protection</b>	105%-135% hiccup mode, auto recovery
<b>Operating temperature</b>	-10°C to +50°C
<b>EMC standards</b>	EN55022 class B, EN 61000-3-2,3 EN61000-4-2,2,3,4,5,6,7,8,11 EN50204
<b>Charger output</b>	13.6 VDC, 3 Amps maximum
<b>Controls</b>	Mains on/off switch, LED condition displays.
<b>Speaker impedance</b>	8 ohm
<b>Speaker power</b>	5 Watts
<b>Connectors DC</b>	2 x DB 15 - 7W2 female for connection to Barrett 2000 series transceivers and accessories. 1 x DB 15 - 7W2 male for connection to auxiliary battery
<b>Connectors AC</b>	IEC
<b>Mounting</b>	Standard bench mounting or optional 19" rack mounting kit (P/N BCA20007)



2022 Power Supply (front panel)



2022 Power Supply (top view)



2022 Power Supply (side view)



#### Head Office:

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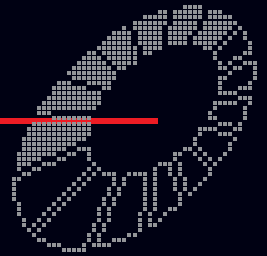
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# 2022 Solar Power Supplies

Solar power supplies vary in price based on user requirements. The six solar power supply packages below have very high specifications in terms of allowance for variations in available sun light and have safety margins ranging from 14% to 28% and array load ratios of 1.5 which is best industry practice for telecommunications solar power supply systems. These systems will operate to specification in Africa, South East Asia, The South Pacific and the Middle East.

Solar packages are quoted without batteries to allow customers to purchase batteries locally as the cost of air-freighting due to battery weights is high. Air-freightable batteries are available if customers prefer a complete package.

Custom solar supplies can be designed and supplied to meet customers exact requirements for different system configurations.

## **BC202201 ground mounted light duty solar supply** **BC202202 roof mounted light duty solar supply**

Light duty supplies will power a Barrett 900 or 2000 series transceiver based on a 12 hour operational day (equipment off over night) 2 hours of voice or selcall transmission per 12 hour period and in receive mode for 12 hours.

Includes:-

- 2 x 75Ahr Solar panels
- Mounting frame
- 20A Solar regulator (includes low voltage load cutout)
- 6m cable from panels to solar regulator
- 1.5m cable from solar regulator to battery.
- Bird spikes

## **BC202203 ground mounted heavy duty solar supply** **BC202204 roof mounted heavy duty solar supply**

Heavy duty supplies will power a Barrett 900 or 2000 series transceiver based on 4 hours of voice or selcall transmission per 24 hour period and in receive mode for 24 hours.

Includes:-

- 2 x 110W Solar panels
- Mounting frame
- 45A Solar regulator (includes low voltage load cutout)
- 5m cabling from panels to solar regulator
- 1.5m cable from solar regulator to battery/batteries.
- Bird spikes

## **BC202205 ground mounted heavy duty solar supply** **BC202206 roof mounted heavy duty solar supply**

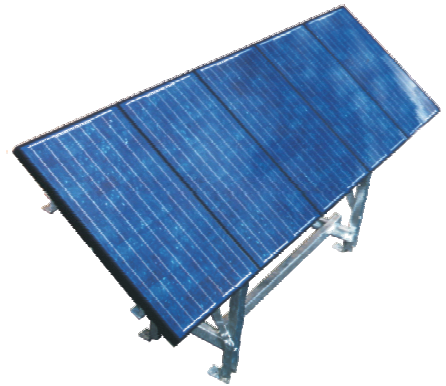
Data system solar power supplies will power a Barrett 900 or 2000 series transceiver, with data modem and notebook computer, based on 6 hours of data, voice or selcall transmission per 24 hour period and in receive mode for 24 hours.

Includes:-

- 11 x 125W Solar panels
- Mounting frame
- 2 x 60A Solar regulator (includes low voltage load cutout)
- 5m cable from panels to solar regulators
- 2m cable from solar regulator to batteries.
- Bird spikes

## **Accessories**

- BCA92203** 100 AH 12V sealed solar block battery - air-freightable
- BCA92208** Cabling kit for paralleling batteries - per additional battery, consists of two heavy duty cables with lugs and two battery lugs



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