

# OM-220-RPS-1 Rechargeable Portable Power Supply



- ✓ General Purpose Power Source for Transducers and Transmitters
- ✓ Weatherproof, Self-Contained, Battery-Powered
- ✓ Two Programmable Output Voltages (3.5 to 22 Vdc, 150 mA)
- ✓ Optically Isolated Power Supply On/Off Control Input
- ✓ Battery State of Charge Indicator, Rechargeable



The OM-220-RPS-1 self-contained battery power source is designed for use in conjunction with the OMEGA OM-220 datalogger to power transducers (eg., strain gages, pressure transducers, 4-20 mA transmitters) requiring external power over a voltage range from 3.5 to 22 Vdc.

The OM-220-RPS-1 contains two user configurable, rechargeable gel-cell type batteries and integral recharging circuitry. The charging circuitry will accept ac or dc current from photovoltaic arrays, wind generators, utility sourced transformers or other current sources. The sealed batteries can operate in any orientation and over a temperature range of 14 to 140°F (-10 to 60°C). The slide switch lets the user configure the OM-220-RPS-1 for 12 or 24 Vdc operation.

Two user-programmable power supply outputs are available that can source seven different regulated voltage levels from 3.5 Vdc to 22 Vdc. Outputs are short circuit/over-current protected. The two power supplies can be independently programmed for output voltage as well as for type of operational mode. Two modes are available: Continuous On or Automatic Operation. In Automatic Operation, the power supply is under the control of an optically isolated low voltage (5 Vdc, 0.5 mA) control input signal. This control input interfaces directly to the power supply's control output line (or other datalogger's control outputs), which in turn cycles the power supplies on and off, providing transducer excitation under OM-220 control during a logging session. This automatic power supply cycling technique maximizes OM-220-RPS-1 battery life.

The OM-220-RPS-1 can also be used as a general-purpose regulated power source for many other types of equipment (alarm systems, control systems, etc.) requiring field power in a remote environment.

Model **OM-220-RPS-1**  
**\$395**

**Current Output:** 300 mA maximum power supply, short circuit protected

**Batteries:** 2 rechargeable, 1.8AH 12 V gel cells, series (24 Vdc) or parallel (12 Vdc) operation. A 3-position user switch selects 12 Vdc, 24 Vdc and Off

#### **CHARGING CIRCUITRY**

**Input Voltage:** 12 Vdc operation, 14 to 20 Vac/Vdc; 24 Vdc operation, 26 to 32 Vac/Vdc

**Current:** 150 mA maximum, automatic current limit control

**Charging Technique:** tapering current, fixed voltage, 13.6 V in 12 Vdc operation; 27.4 V in 24 V mode

**I/O Wiring:** 7/16" binding head terminal strips

**Control Signal:** 5 Vdc, 0.5 A, optically isolated. HIGH turns on power supplies in AUTO mode

**State of Charge:** 10-step bar graph LED of relative battery voltage under load. Indicates LOW to FULL charge

**Housing:** Gasketed rainproof plastic, supplied with liquid-tight wiring fittings (same as OM-220)

**Operating Temperature:** 14 to 104°F (-10 to 40°C) for full capacity and life, 14 to 140°F (-10 to 60°C) with reduced battery life

**Dimensions:** 9.75" H x 8.5" W x 5" D (248 x 216 x 127 mm)

**Weight:** 7 lbs (3.2 kg)