

TPS Tactical Power Supply Series

Weatherproof Power Supply with Battery Charger and Remote Monitoring and Control



The API Technologies TPS Tactical Power Supply Series by API Technologies is a man-portable commercial-off-the-shelf (COTS) solution designed to power C4ISR systems, critical electronic warfare (EW) and weapons equipment. The TPS features weatherproof & ruggedized construction which allows it to withstand extreme temperature and harsh environments. When fielded, the TPS supports powering fielded special ops equipment reducing vehicle wear and tear and fuel consumption.

The TPS converts AC power from generators or community power and converts power to 28 VDC power at a variety of amperages (150A, 100A, and 75A models). Source power of AC can be one of three different AC inputs.







- 1 x Three Phase WYE, 208/120 VAC
- 1 x Single Phase, 240/120 VAC Mid-Point Neutral
- 3 x Single Phase, 100-127 VAC

The reverse polarity protected battery charger provides 28 Volts of DC power at 10 Amps to a connected battery. The battery detect feature identifies when a battery is connected and determines state of charge and float charges the battery to 100% for immediate crank-ready state.

The TPS has a built-in “soft start” feature, circuit protection, and transient voltage suppression. Integrated forced air cooling and heat sinks aid in heat dissipation while automatic overtemperature shut down to protect the TPS and critical loads. Manually check status of AC inputs, DC output, LAN connection, Transient Voltage Suppression (TVS), battery charger, and temperature with the “push to view” status indicator button on the front panel.

The TPS provides remote monitoring via communication and monitoring protocols include Telnet, SNMPv2, and Web Interface. Users can remotely turn the DC outlet on/off, get the battery charger status, create alarm limits DC Voltage and monitor the voltage and current status.

Features

	<p>AC INPUT: 1 x Three Phase WYE, 208/120 VAC 1 x Single Phase, 240/120 VAC Mid-Point Neutral 3 x Single Phase, 100-127 VAC DC OUTPUT: 28 VDC @ 10 A</p>
	<p>Integrated battery charger; 28 Volts of DC power at 10A; Battery detect feature to ensure connection and state of charge; Reverse polarity protection included;</p>
	<p>Withstands extreme temperatures, shock and vibration; Weatherproof and water resistant housing; Meets MIL-STD 810 and MIL-STD 461;</p>
	<p>Remote monitoring with user enabled remote ON/OFF for the DC outlet and the battery charger. Alarm limits creation for line input voltage, and more. Telnet and Web Interface communication and monitoring protocols.</p>
	<p>EMI filtering to protect against noise and interference from other electronic devices.</p>
	<p>Transient voltage and circuit protection</p>

Technical Specifications

Item	Specification
AC Power Entry Connector	MIL-DTL-5015, 28-1P Locking Bayonet Connector
Input Power - Single connector permits three types of input power	1 x Three Phase WYE, 208/120 VAC 1 x Single Phase, 240/120 VAC Mid-Point Neutral 3 x Single Phase, 100-127 VAC
Input Frequency	47 - 63 Hz
Input Current	20A/Line @ Full Load
Overload Protection	25A/3P Circuit Breaker, Flat Rocker Style
DC Output Connectors	MIL-DTL-5015 32-5S Locking Bayonet Connector
Communication Interface	10/100 BaseT Ethernet
Network Interface	TCP/IP, Telnet, SNMPv2, HTTP, Web
Push to View Status Indicators	AC Power Input, DC Power Output, Battery Charger, LAN, High Temperature, Transient Voltage Suppression (TVS)
Battery Charger	28VDC@10A bulk charging capacity MIL-DTL-5015, 16-11S locking bayonet connector Intelligent battery charging Reverse polarity protection
Operating Temperature	-40°F (-40°C) to 140°F (60°C)
Cooling	Integrated Forced Air Cooling
Humidity	Humidity: 0 to 95% (Non-condensing)
Elevation	Elevation: 15,000 ft (4,572 meters)
Storage Temperature	-40°F (-40°C) to 140°F (60°C)
Humidity	Humidity: 0 to 95% (Non-Condensing)
Elevation	Elevation: 32,808 ft (10,000 meters)
Mechanical Characteristics	Enclosed, Waterproof Chassis Rugged construction designed per MIL-STD 810
Remote Monitoring	AC Line Input Voltage; DC Output Voltage; DC Output Current; Operational Status
Remote Control	DC power output On/Off; battery charger On/Off

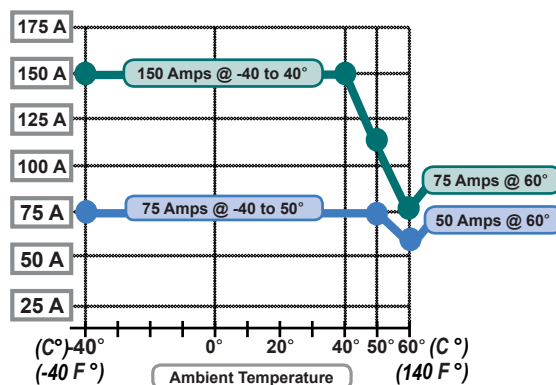
P/N	Output Voltage	Output Current	Weight 1	Dimensions1
7200-A-155	150 A @ 28VDC	4200 Watts	85 lbs	17" W x 17.475" H x 13" D
7200-A-161	75 A @ 28VDC	2100 Watts	55 lbs	13.75" W x 11.5" H x 12" D

Note 1: Optional Mounting Brackets and Roll Cage Change Dimensions & Weight

Maximum Operating Ranges

- **7200-A-155**
- **7200-A-161**

Maximum operating ratings in chart are for AC input configuration: three-phase 4 wire WYE, 190-220 L-L VAC

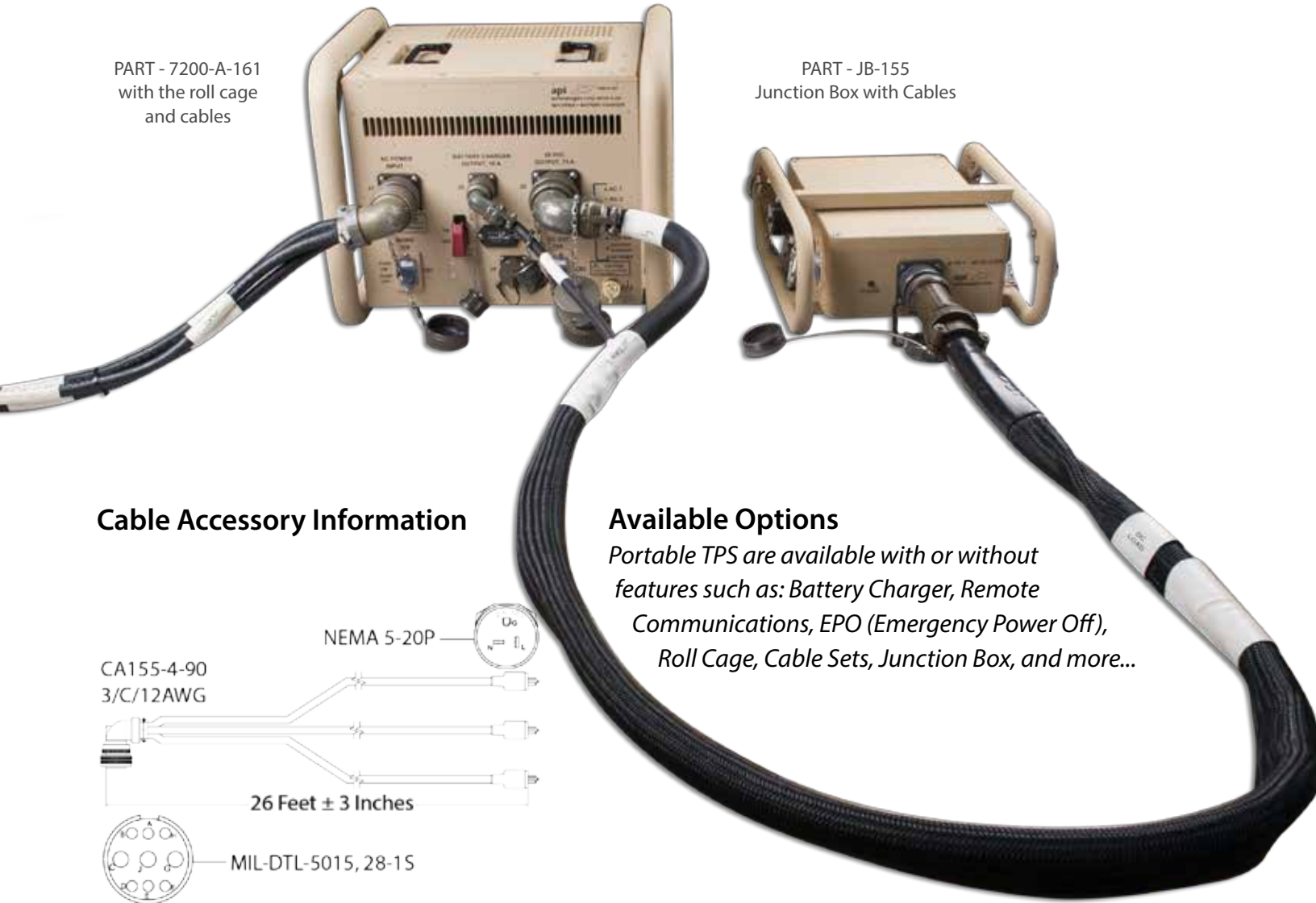


Product Designed to Meet MIL-STD Environment Standards

- Water Resistant
- Thermal Shock
- Salt & Fog
- Blowing Sand & Dust
- Fungus
- Mechanical Shock & Vibration
- Ground Bond
- MIL STD 810 & 461

PART - 7200-A-161
with the roll cage
and cables

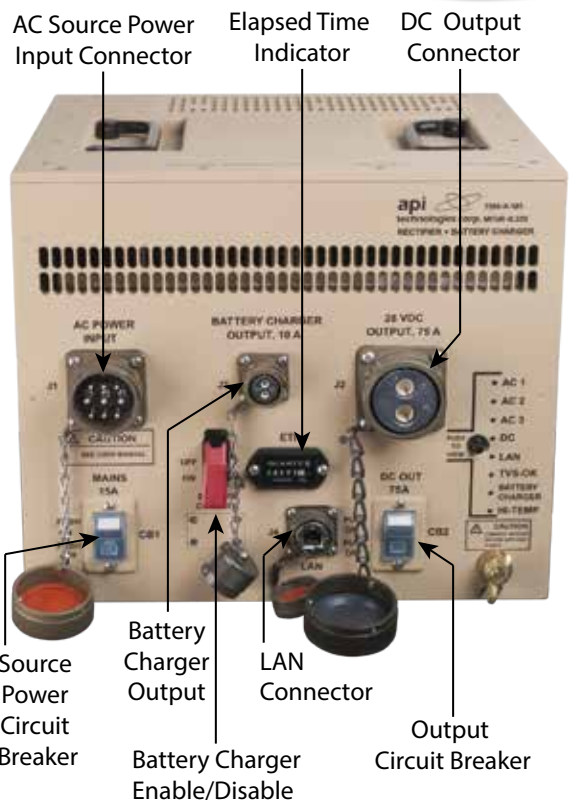
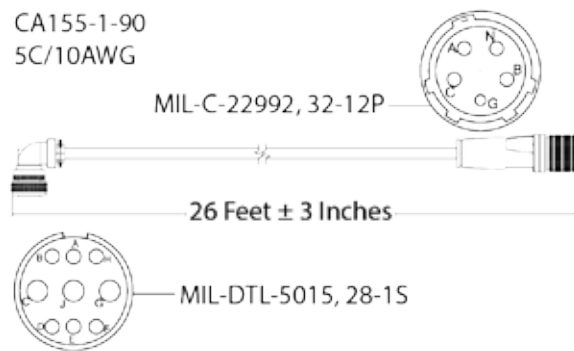
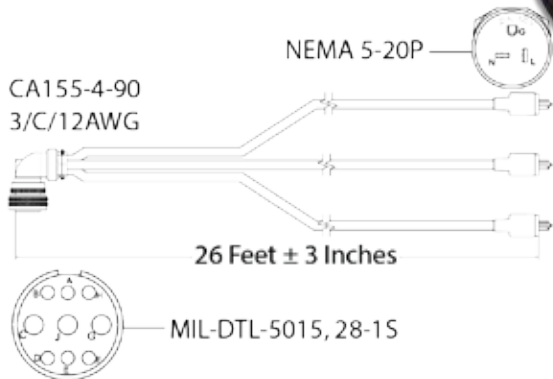
PART - JB-155
Junction Box with Cables

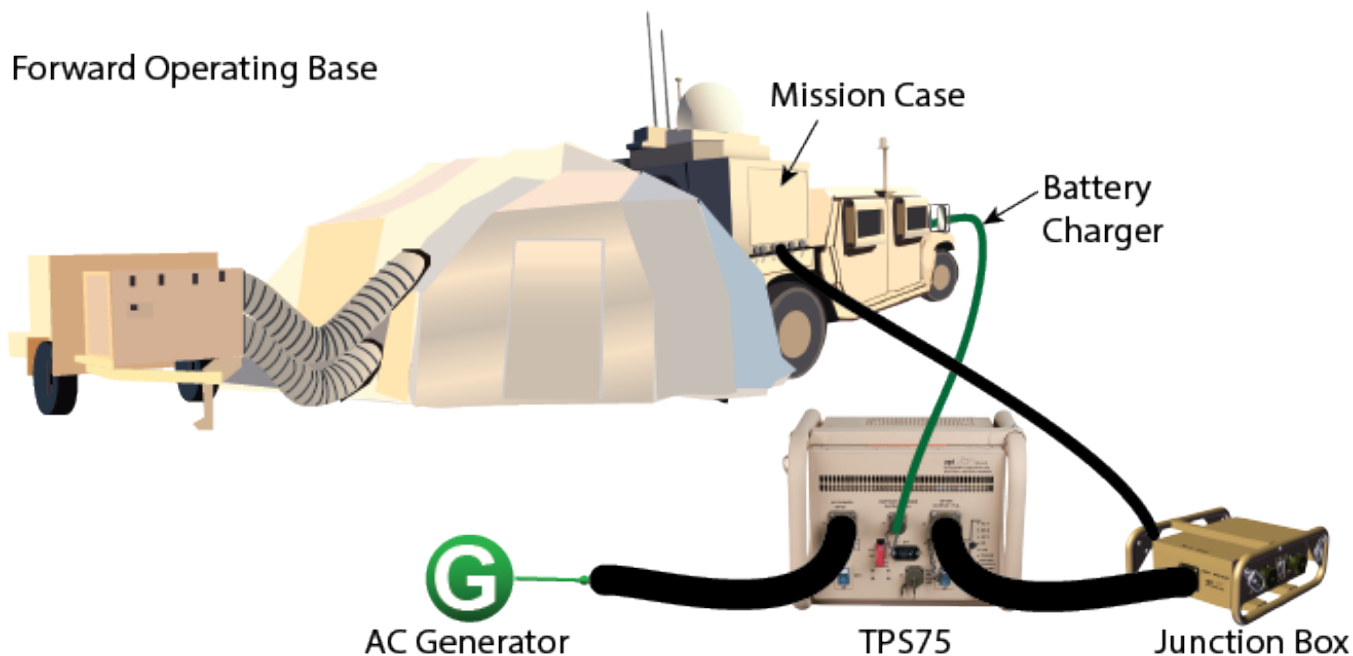


Cable Accessory Information

Available Options

Portable TPS are available with or without features such as: Battery Charger, Remote Communications, EPO (Emergency Power Off), Roll Cage, Cable Sets, Junction Box, and more...





Military Applications

- C4ISR
- Common Ground System Shelters
- Mission Control Shelters
- Satellite Communication (SATCOM)
- UAV Ground Stations
- Transit Cases
- Simulation and Training Shelters
- Network Infrastructure
- Forward Operating Base (FOB)
- Tactical Operations Center (TOC)
- Automated Test Equipment (ATE)
- Airborne (400Hz Models)
- Ground Radar Platforms

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