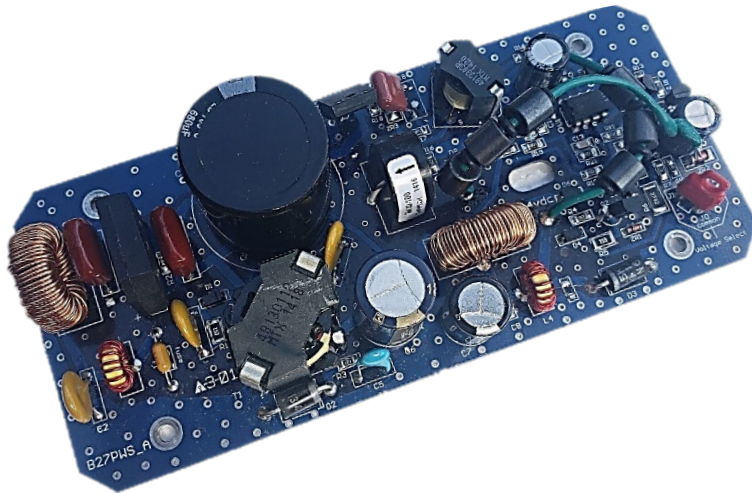


Power Supply for BBI 2PAC-MOT Line Extenders

For Broadband International® 550-1218 MHz 2PAC-MOT Line Extenders



The power supply is a fixed frequency-switching regulator that allows for a superior power factor to the 40-90 volt input line. The 27PS BBI power supply is installed in the back of the BBI 2PAC-MOT amplifier module, and the amplifier module must be removed from the field for repair.

Operating Parameters

Operating Parameters	
Input Voltage	40-90 volts AC or 30-90 Volts AC
Output Voltage	+24 Volts DC +/- .5 volts
DC output current at 24 volts DC	2 amperes MAX
Length	6.5 in
Width	2.8 in
Height	1.3 in
Weight	7.0 oz.

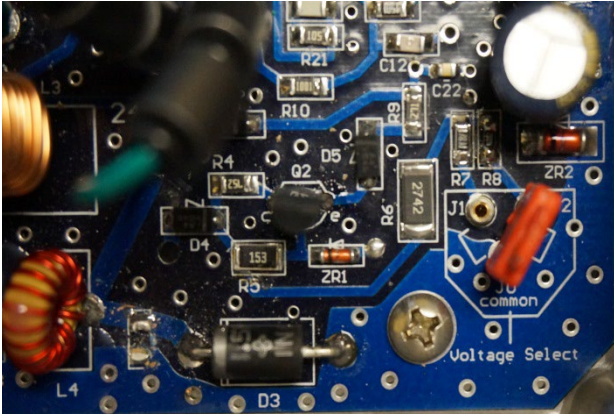
OEM P/N	BBI P/N	Description
321200	321200	30/40-90 volts AC to 24 volts DC Power Supply

Features:

- Replacement power supply for BBI 2PAC-MOT Line Extenders
- 60 or 90 volt AC powering capability
- Operating temp from -40° to 140°F (-40° to 60°C)
- +24 volts 2 Amp DC high-efficiency power supply
- Installs into any BBI 550 MHz to 1.2 GHz 2PAC-MOT amplifier.
- 30 and 40 Volt selectable operating position

Switching the Power Supply shut-off voltage from 40 to 30 volt cutoff position

Units ships from the factory in the 40 volt shut-off position with the jumper installed in the J-1 position. Relocate the red jumper in the power supply to the J-2 position to activate the 30 volt shut off position. Jumper is shown in the 30 volt position below.



Broadband International 2PAC MOT BLE Power Supply Test Data

Test - Cold Start of BBI 1.2 GHz 2PAC-MOT modules at -40 C



Procedure

Cold Start after 1-hour soak at -40 C in an unpowered state, the amplifier must be able to power on and operate properly with an input voltage of 45/40 VAC.

Amplifier placed in chamber with coaxial cables on Forward input port and Main output port. Powering was applied through the output port with RF terminated on this port as shown in Figure 1.

Figure 1



The amplifier under test was verified as operational at 40 and 45 volts AC before shutting the voltage off to the amplifier. The 30/40 volt selectable jumper was placed in the 40-volt position. The voltage source was confirmed at 40.4 at the output of the power supply source and 40.0 inside the amplifier under test. Chamber was set on -40 C and allowed to run 30 minutes prior to starting the 1 hour timed test. Chamber was confirmed at -40.3. The 40-volt AC powering was reapplied to the amplifier. The amplifier immediately resumed operations as documented in Figure 3 to Figure 5.

2PAC-MOT Amplifiers	
	40 volt positions
High Voltage	90
Low Voltage cutoff	37
Low voltage turn on	39

Figure 2

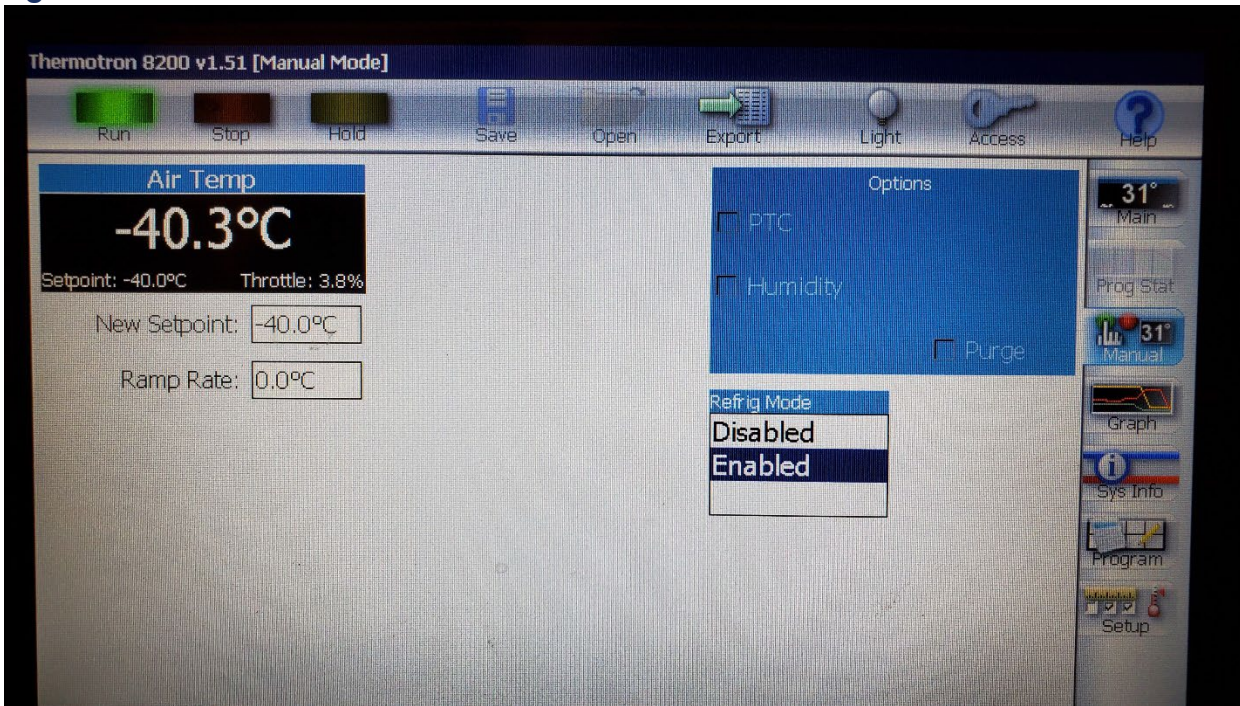


Figure 3
-40 C

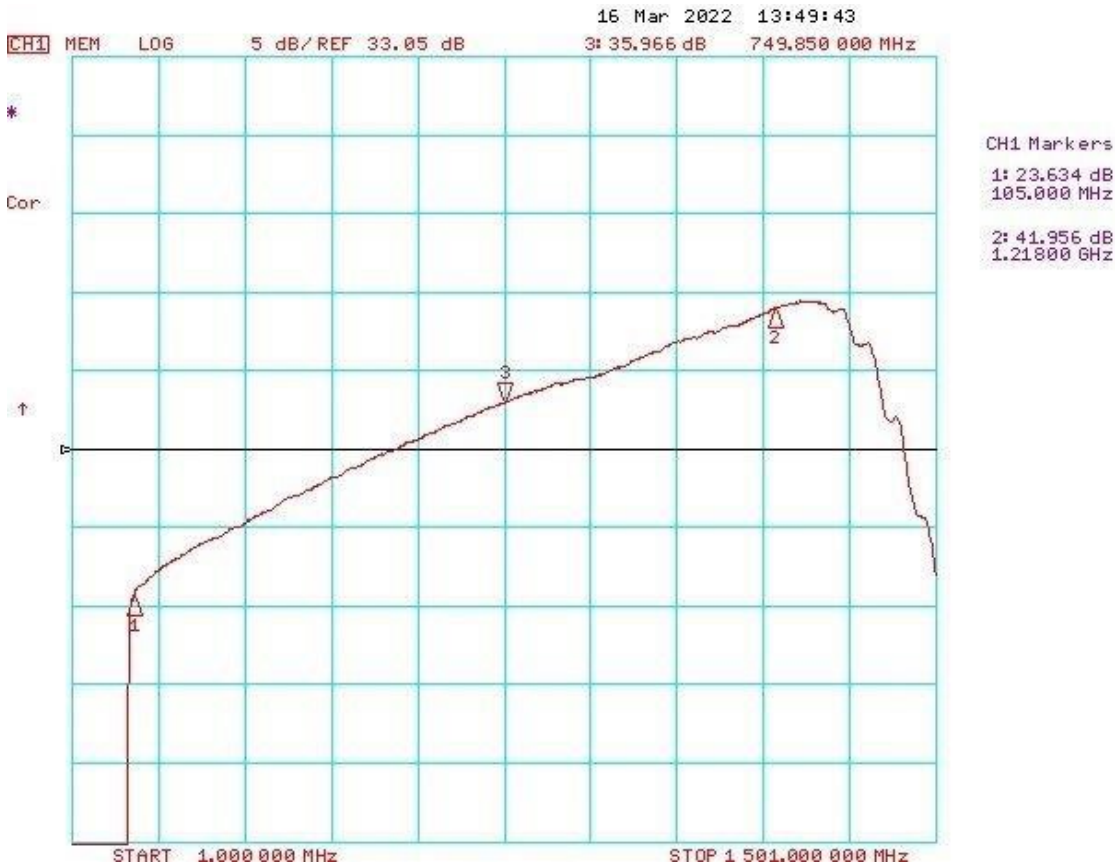


Figure 4
-40C at 39 volts AC



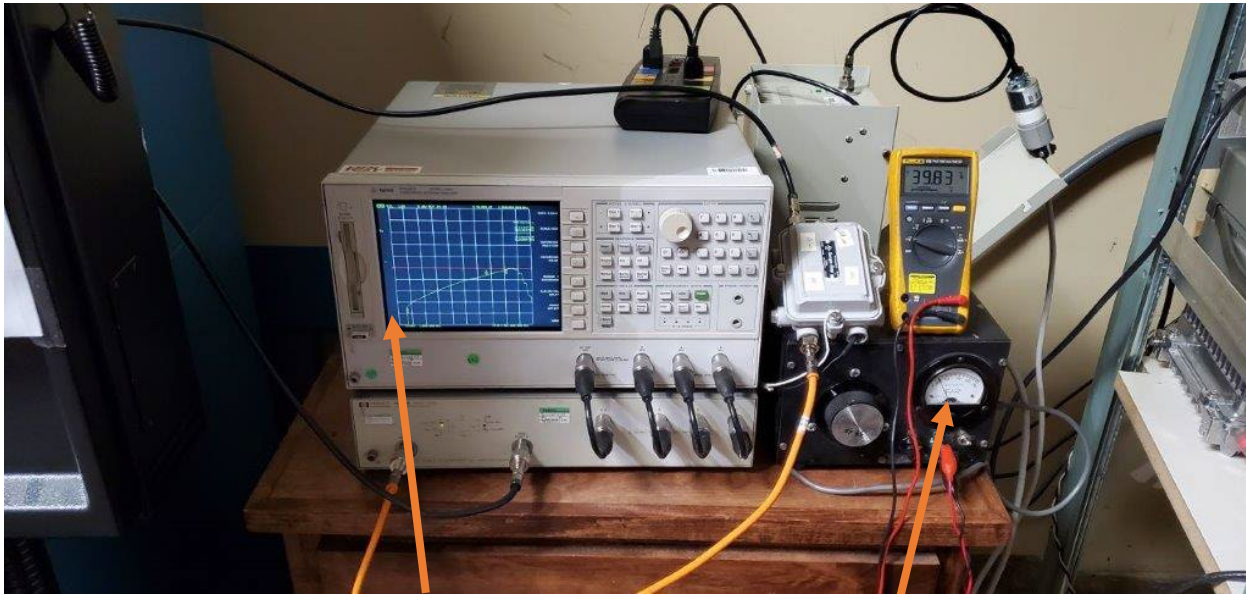
Figure 5
-40C at 90 volts AC



Setup Procedure for Cold Start testing



Quasi-Square Wave power supply – output to variable AC transformer



Network Analyzer for Sweep trace documentation

Variable AC Power controller



Amplifier as installed in test chamber.