Configuration
Individually controlled solid-state programmable phase shifters. Number of phase shifters can be selected from 1 to 8 phase shifters.

Frequency Range
1500-3000 MHz

Phase Range
0-358.6° in 1.4° steps

Method of Operation
To set a phase shifter in this assembly to a desired phase with maximum accuracy, a center frequency must first be set with a command.

After the center frequency and phase are then set, any subsequent phase settings will be at the original center frequency until a new center frequency is set.

Each phase shifter in the assembly can be set to a different center frequency and/or phase.

Enclosure Type
19 inch rack mount
2RU high (for 1-8 phase shifters)

Impedance
50 Ohms nominal

Startup/Default States
1500 MHz / 0° phase (see PHASESHIFTER command)
DHCP enabled (see NET command)
4 Ethernet users (see NET command)
Prompts off (see PROMPT command)

All of these default settings can be changed by user. Unit can be configured for up to 12 Ethernet users.

VSWR
2.0:1 maximum
< 1.5:1 typical

Phase Accuracy
± 3° maximum @ selected frequency
< 1° typical @ selected frequency

< 2° typical (40 MHz bandwidth)
< 4° typical (80 MHz bandwidth)
< 10° typical (200 MHz bandwidth)

Ex: If frequency set to 2000 MHz, phase settings will typically be within 2° of that setting from 1980-2020 MHz, or 4° from 1960-2040 MHz)

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Insertion Loss

10 dB maximum
9.0 dB typical @ 1500 MHz
7.0 dB typical @ 2000 MHz
6.0 dB typical @ 3000 MHz

RF Input Power

+25 dBm average
+28 dBm no damage

Switching Speed

1 microsecond typical
(after command is received and processed)
(3 milliseconds typical processing time)

Manual Control

20-Button Keypad and LCD display
(IP Address configurable via keypad)
(Net mask configurable via keypad)
(Gateway configurable via keypad)
(Baud rate configurable via keypad)

Remote Control

Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)
RS-232 (up to 115200 Baud)

Remote Commands

Phase Shifter Control Commands:
Phase Shifter, Set Phase Shifter Phase, Set Phase Shifter Frequency, Read Phase Shifter, Set All Phase Shifter Phase, Set All Phase Shifter Frequency, Read All Phase Shifter, Fade Phase Shifter

System Commands:
Help, Identification, Store, Recall, Pause, Net, Serial, Close, Disconnect, MOTD, Date, Message, Restrict, IDENT, Name, Show Users, Reboot, Uptime, Prompt

RF Connector

SMA or N female

Operating Temperature Range

0°C to +50°C

AC Supply

100-240 VAC @ 47-63 Hz

Outline Drawing Numbers

092-9228 (N female, 1-8 phase shifters)
092-9227 (SMA female, 1-8 phase shifters)
Example Model Numbers

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>50PSA-101-01 SMA</td>
<td>1 phase shifter</td>
</tr>
<tr>
<td>50PSA-101-02 SMA</td>
<td>2 phase shifters</td>
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<td>50PSA-101-03 SMA</td>
<td>3 phase shifters</td>
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