

Scanning A/D Description

The HP E1413C Scanning A/D Converter is a VXIbus C-Size, register-based instrument. The E1313A is a VXIbus B-Size, register-based instrument. The Scanning A/D operates in a VXIbus mainframe using a Command Module and Standard Commands for Programmable Instruments (SCPI).

The instrument can measure DC voltage, resistance, temperature, and strain when appropriate Signal Conditioning Plug-Ons (SCPs) are installed on the instrument (see "Scanning A/D (SCPs)"). The Scanning A/D has 100 kHz scanning rate up to 100,000 readings/sec with full autozeroing and autocalibration.

Scanning A/D Specifications

See *Appendix A - Specifications* in the *HP E1413C User's Manual* for HP E1413C Scanning A/D specifications. These specifications are the performance standards or limits against which the instrument may be tested.

Scanning A/D Environment

The HP E1413C Scanning A/D and SCPs should be stored in a clean, dry environment. Recommended operating/storage environments for the HP E1413C Scanning A/D and SCPs are:

Table 1-1. Environmental Specifications

	Temperature	Relative Humidity
Operating Environment	0°C to +55°C	<65% (0°C to +40°C)
Storage/Shipment	-40°C to +75°C	<65% (0°C to +40°C)

Scanning A/D (SCPs)

When introduced, SCPs were sold as options to the E1313A and E1413A/B. These options are obsolete and replaced by an SCP model number. For your convenience, the option numbers and model numbers are both listed in Table 1-2.

Table 1-2. Signal Conditioning Plug-Ons

SCP Model Number	E1313A E1413A/B Option	Description	SCP Model Number	E1313A E1413A/B Option	Description
E1501A	011	Direct Input SCP	E1510A	020	4 Channel Sample & Hold
E1502A	012	Low Pass Filter Input SCP	E1511A	021	4 Channel Transient Strain
E1503A	013	Gain/Filter Input SCP	E1512A	None	8 Channel 25Hz Low Pass
E1504A	014	Breadboard (no tests)	E1513A	None	Attenuator Input / 16
E1505A	015	Current Source SCP	E1514A	None	Iso x1, 4 Channel 10Hz LP
E1506A	016	120 Ω Strain Gage SCP	E1515A	None	Iso x1, 4 Channel 100Hz LP
E1507A	017	350 Ω Strain Gage SCP	E1516A	None	Iso x64, 4 Channel 10Hz LP
E1508A	018	Fixed Gain/Filter Input SCP	E1517A	None	Iso x64, 4 Channel 100Hz LP
E1509A	019	Fixed Gain/Filter Input SCP	E1518A	None	Resistance Measurement