

# 6521 6522

- 10 channels of multiplex switching
- Install directly in 6517B's option slot
- Choose from low current scanning or high impedance voltage switching with low current switching
- <200 $\mu$ V contact potential
- <1pA offset current
- Compatible with Keithley's Model 6517 and 6517A Electrometers

## Ordering Information

- 6521 Low Current, 10-channel Scanner Card**
- 6522 Low Current, High Impedance Voltage, 10-channel Scanner Card**

## SERVICES AVAILABLE

6521-3Y-EW	1-year factory warranty extended to 3 years from date of shipment
6522-3Y-EW	1-year factory warranty extended to 3 years from date of shipment

# Low Current, 10-channel Scanner Cards for 6517B



Two optional 10-channel plug-in scanner cards are available to extend the measurement performance of the Model 6517B Electrometer/High Resistance Meter. The cards install directly into the option slot in the back panel of the Model 6517B. The cards are also compatible with the Models 6517A and 6517.

The Model 6521 Low Current Scanner Card is a 10-channel multiplexer, designed for switching low currents in multipoint testing applications or when the test configuration must be changed. Offset current on each channel is <1pA and high isolation is maintained between each channel (>10<sup>15</sup> $\Omega$ ). The Model 6521 maintains the current path even when the channel is deselected, making it a true current switch. BNC input connectors help provide shielding for sensitive measurements and make the card compatible with low noise coaxial cables. The Model 6521 is well suited for automating reverse leakage tests on semiconductor junctions or gate leakage tests on FETs.

The Model 6522 Voltage/Low Current Scanner Card can provide up to ten channels of low-level current, high impedance voltage, high resistance, or charge switching. Although it is similar to the Model 6521 in many ways, the Model 6522's input connectors are 3-lug triax. The card can be software configured for high impedance voltage switching of up to 200V. Triaxial connectors make it possible to float the card 500V above ground and drive guard to 200V.

### MODEL 6521 SPECIFICATIONS

**CHANNELS PER CARD:** 10.  
**FUNCTIONS:** Amps.  
**CONTACT CONFIGURATION:** Single pole, "break-before-make" for signal HI input. Signal LO is common for all 10 channels and output. When a channel is off, signal HI is connected to signal LO.  
**CONNECTOR TYPE:** Inputs BNC, Outputs Triaxial.  
**SIGNAL LEVEL:** 30V, 500mA, 10VA (resistive load).  
**CONTACT LIFE:** >10<sup>6</sup> closures at maximum signal level; >10<sup>7</sup> closures at low signal levels.  
**CONTACT RESISTANCE:** <1 $\Omega$ .  
**CONTACT POTENTIAL:** <200 $\mu$ V.  
**OFFSET CURRENT:** <1pA (<30fA typical at 23°C, <60% RH).  
**ACTUATION TIME:** 2ms.  
**COMMON MODE VOLTAGE:** <30V peak.  
**ENVIRONMENT: Operating:** 0° to 50°C up to 35°C at 70% R.H. **Storage:** -25° to 65°C.

### MODEL 6522 SPECIFICATIONS

**CHANNELS PER CARD:** 10.  
**FUNCTIONS:** Volts, Amps.  
**CONTACT CONFIGURATION:** Single pole, "break-before-make" for signal HI input. Signal LO is common for all 10 channels and output. When a channel is off, signal HI is connected to signal LO. 6517B can also configure channels as voltage switches.  
**CONNECTOR TYPE:** Inputs: Triaxial. Outputs: Triaxial.  
**SIGNAL LEVEL:** 200V, 500mA, 10VA (resistive load).  
**CONTACT LIFE:** >10<sup>6</sup> closures at maximum signal level; >10<sup>7</sup> closures at low signal levels.  
**CONTACT RESISTANCE:** <1 $\Omega$ .  
**CONTACT POTENTIAL:** <200 $\mu$ V.  
**OFFSET CURRENT:** <1pA (<30fA typical at 23°C, <60% RH).  
**CHANNEL ISOLATION:** >10<sup>13</sup> $\Omega$ , <0.3pF.  
**INPUT ISOLATION:** >10<sup>10</sup> $\Omega$ , <125pF (Input HI to Input LO).  
**ACTUATION TIME:** 2ms.  
**COMMON MODE VOLTAGE:** <300V peak.  
**ENVIRONMENT: Operating:** 0° to 50°C up to 35°C at 70% R.H. **Storage:** -25° to 65°C.

