



6611C - 6614C

## Precision Measurement, Single-Output: 40 W and 50 W

- Precision low current measurement
- Low output noise
- High speed programming
- GPIB and RS-232 interface
- SCPI (Standard Commands for programmable instruments)
- VXI *plug&play* drivers

### SPECIFICATIONS

(at 0° to 55° C unless otherwise specified)

| Single Output System  |   |                | 6611C             | 6612C              | 6613C               | 6614C                 |
|---|---|----------------|-------------------|--------------------|---------------------|-----------------------|
| <b>Output Ratings</b>   | Voltage/Current   |                | 0 to 8 V/0 to 5 A | 0 to 20 V/0 to 2 A | 0 to 50 V, 0 to 1 A | 0 to 100 V/0 to 0.5 A |
| <b>Programming accuracy</b><br>(at 25° C ±5° C)   | Voltage/+Current  | 0.05% +        | 5 mV/2 mA         | 10 mV/1 mA         | 20 mV/0.75 mA       | 50 mV/0.5 mA          |
| <b>Ripple and noise</b><br>20 Hz to 20 MHz, with outputs ungrounded or with either terminal grounded                        | Voltage Normal mode   | rms/p-p<br>rms | 0.5 mV/3 mV       | 0.5 mV/3 mV        | 0.5 mV/4 mV         | 0.5 mV/5 mV           |
|   |   |                | 2 mA              | 1 mA               | 1 mA                | 1 mA                  |
| <b>dc measurement accuracy</b><br>via GPIB or front-panel meters<br>respect to actual output at 25° C ±5° C                 | Voltage   | 0.03% +        | 2 mV              | 3 mV               | 6 mV                | 12 mV                 |
|   | Low current range<br>-20 mA to +20 mA   | 0.1% +         | 2.5 µA            | 2.5 µA             | 2.5 µA              | 2.5 µA                |
|   | High current range<br>+20 mA to + rated 1   | 0.2% +         | 0.5 mA            | 0.25 mA            | 0.2 mA              | 0.1 mA                |
|   | -20 mA to - rated 1   | 0.2% +         | 1.1 mA            | 0.85 mA            | 0.8 mA              | 0.7 mA                |
| <b>Load regulation</b>  | Voltage/Current   |                | 2 mV/1 mA         | 2 mV/0.5 mA        | 4 mV/0.5 mA         | 5 mV/0.5 mA           |
| <b>Line regulation</b>  | Voltage/Current   |                | 0.5 mV/ 0.5 mA    | 0.5 mV/0.5 mA      | 1 mV/0.25 mA        | 1 mV/0.25 mA          |
| <b>Transient response time</b>  | Less than 100 µs for the output to recover to its previous level (within 0.1% of the voltage rating of the supply or 20 mV, whichever is greater) following any step change in load current of up to 50% of the output current rating of the supply |                |                   |                    |                     |                       |
| <b>Supplemental Characteristics</b> (Non-warranted characteristics determined by design and useful in applying the product) |   |                |                   |                    |                     |                       |
| <b>Average programming resolution</b>   | Voltage/Current   |                | 2 mV/1.25 mA      | 5 mV/0.5 mA        | 12.5 mV/0.25 mA     | 25 mV/0.125 mA        |
| <b>Sink current</b>   |   |                | 3 A               | 1.2 A              | 0.6 A               | 0.3 A                 |

**dc Floating Voltage:** Output terminals can be floated up to ±240 Vdc maximum from chassis ground

**Remote Sensing:** Up to two volts dropped in each load lead. Add 2 mV to the voltage load regulation specification for each one volt change in the positive output lead due to load current change.

**Command Processing Time:** Average time required for the output voltage to begin to change following receipt of digital data is 4 ms for the power supplies connected directly to the GPIB.

**Output Programming Response Time:** The rise and fall time (10/90% and 90/10%) of the output voltage is less than 2 ms. The output voltage change settles within 1 LSB (0.025% x rated voltage) of final value in less than 6 ms.

**GPIB Interface Capabilities:** IEEE-488.2, SCPI command set, and 6630A Series programming compatibility

**Input Power:** (full load): 1.6 A, 100 W (6611C: 2.2 A, 120 W)

**Regulatory Compliance:** Complies with EMC directive 89/336/EEC (ISM 1B). See page 73 for more information.

**Warranty Period:** Three years

**Size:** 212.8 mm W x 88.1 mm H x 368.3 mm D  
(8.4 in x 3.5 in x 14.5 in)

See page 54 for more details

**Weight:** 8.2 kg (18.16 lb) net; 10.6 kg (23.5 lb) shipping

### Ordering Information

- Opt 100 87 to 106 Vac, 47 to 63 Hz
- Opt 120 104 to 127 Vac, 47 to 63 Hz
- Opt 220 191 to 233 Vac, 47 to 63 Hz
- Opt 230 207 to 253 Vac, 47 to 63 Hz
- Opt 760 Isolation and Reversal relays
- \*Opt ICM Rack-mount Kit (p/n 5063-9240)
- \*Opt AXS Rack-mount Kit side-by-side mounting of two units, Lock-link Kit p/n 5061-9694; Flange Kit p/n 5062-3974
- Opt 0L2 Additional standard documentation package
- Opt 0B3 Service Manual
- \*Support rails required

### ACCESSORIES

Rack-mount and slide for two side-by-side units of different lengths p/n 1494-0015, 5063-9255 and filler panel 5002-3999

Rack-mount slide and support for one instrument p/n 1494-0015, 5063-9255 and filler panel 5002-3999

E3663AC Support rails for Agilent rack cabinets

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The preceding page(s) are an excerpt from the *2001-2002 Power Products Catalog*.

We hope that these pages supply the information that you currently need.

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Product specifications and descriptions in this document subject to change without notice.