

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E3630A

The Keysight Technologies (formerly Agilent / HP) E3630A is a compact and reliable 35-watt triple-output linear DC power supply. Designed specifically for benchtop manual testing, it provides low noise, stable output voltages, and built-in auto-tracking of the $\pm 20\text{V}$ outputs to simplify circuit testing that requires balanced positive and negative voltages.

SPECIFICATIONS

General

Interfaces	None (manual analog control only)
Display	Dual 3-digit LED displays

Physical

Operating Temperature	0 to 40 °C °C
Dimensions (W×H×D)	213 mm × 91 mm × 318 mm mm
Weight	3.8 kg kg

Output Ratings

Number of Outputs	3
Output 1 Voltage Range	0 to +6 V
Output 1 Current Range	0 to 2.5 A
Output 2 Voltage Range	0 to +20 V
Output 2 Current Range	0 to 0.5 A
Output 3 Voltage Range	0 to -20 V
Output 3 Current Range	0 to 0.5 A
Total Output Power	35 W
Tracking Operation Range	0 to $\pm 20\text{ V}$ (auto-tracking)

Load and Line Regulation

Load Regulation Voltage (+6V Output)	< 0.01% + 2 mV
Load Regulation Voltage ($\pm 20\text{V}$ Outputs)	< 0.01% + 2 mV
Line Regulation Voltage (+6V Output)	< 0.01% + 2 mV
Line Regulation Voltage ($\pm 20\text{V}$ Outputs)	< 0.01% + 2 mV

Ripple and Noise

Normal Mode Voltage Ripple (RMS)	< 350 μV
Normal Mode Voltage Ripple (Peak-to-Peak)	< 1.5 mV

Transient Response and Stability

Transient Recovery Time	< 50 μ s for output to recover within 15 mV after a change from full load to half load
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User Interface and Metering

Display Meter Type	Dual 3-digit LED displays
Meter Accuracy	$\pm 0.5\% + 2$ counts at $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$
Output Control Style	Analog potentiometers (+6V Voltage, $\pm 20\text{V}$ Voltage, Ratio/Track)
Auto-Tracking Ratio Range	Continuously variable from 0 to 1:1

Protection and Isolation

$\pm 20\text{V}$ Output Overload Protection	Fixed current limiting (starts at 0.55 A)
Overload Indicators	One LED indicator

Power Requirements

AC Input Voltage Options	100 Vac / 115 Vac / 230 Vac ($\pm 10\%$, option dependent)
AC Input Frequency Range	47 to 63 Hz
Maximum Input Power	114 VA

Environmental Specifications

Cooling Mechanism	Convection cooling (fanless)
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Physical Characteristics

Output Terminals	5-way binding posts
Binding Post Spacing	19 mm (0.75 in)

Protection

+6V Output Current Limit Type	Foldback
+6V Output Short-Circuit Current	approx. 1.0 A
$\pm 20\text{V}$ Output Current Limit Type	Fixed current limiting
Overvoltage Protection (OVP)	Not supported
Overcurrent Protection (OCP)	Not supported (current limiting only)

User Interface & Controls

Number of Analog Meters	0
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Inputs & Outputs

Remote Sensing	Local sensing only
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TECHNOLOGY

Linear

APPLICATIONS

Benchtop DC power supply for electronics prototyping, testing, and design

