

KEYSIGHT TECHNOLOGIES (AGILENT HP)

6632A

The HP Keysight 6632A is a high-performance 100-watt linear system power supply designed for automated testing. It offers two-quadrant operation with both sourcing and sinking capabilities up to 5 A, high-precision programming and readback, low ripple and noise, and a built-in GPIB interface.

SPECIFICATIONS

General

Interfaces	GPIB (HP-IB)
Display	Vacuum Fluorescent Display (VFD)
Calibration Cycle	1 year

Physical

Power Supply	100 VAC / 120 VAC / 220 VAC / 240 VAC ($\pm 10\%$), 47 to 63 Hz, 350 VA
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425.5 mm × 88.1 mm × 364.4 mm mm
Weight	10.5 kg kg
Rack Height (U)	2U

Output Ratings

Rated Output Voltage	20 V
Rated Output Current	5 A
Maximum Output Power	100 W
Number of Channels	1
Output Voltage Range	0 to 20 V
DC Output Voltage Programming Range	0 to 20.475 V
DC Output Current Range	-5 A to +5 A
DC Output Current Programming Range	0.02 to 5.1188 A
Isolation Voltage to Chassis	± 240 Vdc

Load and Line Regulation

Voltage Load Regulation	0.01% + 2 mV
Current Load Regulation	0.01% + 1 mA
Voltage Line Regulation	0.01% + 1 mV
Current Line Regulation	0.01% + 1 mA

Programming Accuracy

Voltage Programming Accuracy	0.05% + 10 mV
Current Programming Accuracy	0.15% + 10 mA
Voltage Programming Temperature Coefficient	0.01% + 0.5 mV per °C
Current Programming Temperature Coefficient	0.02% + 0.5 mA per °C
Overvoltage Protection Accuracy	1.6% + 0.4 V

Readback Accuracy

Voltage Readback Accuracy	0.05% + 7 mV
Current Readback Accuracy (Source)	0.1% + 2.5 mA
Current Readback Accuracy (Sink)	0.2% + 4.5 mA
Voltage Readback Temperature Coefficient	0.01% + 0.5 mV per °C
Current Readback Temperature Coefficient	0.02% + 0.5 mA per °C

Ripple and Noise

Voltage Ripple and Noise (RMS)	0.3 mV
Voltage Ripple and Noise (Peak-to-Peak)	3 mV
Current Ripple and Noise (RMS)	2 mA

Programming and Readback Resolution

Voltage Programming Resolution	5 mV
Current Programming Resolution	1.25 mA
Overvoltage Protection Resolution	100 mV
Voltage Readback Resolution	5 mV
Current Readback Resolution	1.25 mA

Transient Response and Dynamic Characteristics

Load Transient Response	100 µs
-------------------------	--------

Protection and Monitoring Features

Overvoltage Protection (OVP) Trip Range	2.2 V to 22 V
Remote Sense Compensation Capability	Up to 0.5 V per lead
Output Sensing	Local or remote (rear jumper selectable)
Sinking Capability	Two-quadrant, sinks up to 5 A

Control and Connectivity

Control Interface	GPIB (HP-IB)
Software Calibration	Yes, fully calibrated over HP-IB without opening the chassis
Command Language	HP Proprietary HP-IB command set
Front Panel Controls	Local programming capability via front panel keypad
Fast or Normal Mode Selection	Rear-panel switch
Output Connections	Rear-panel screw terminals
Self-Test Capability	Yes, performed automatically at power-on or via GPIB command
Optional Built-In Relays and DFI/RI	Option 760

AC Input Specifications

Input Voltages	100 VAC / 120 VAC / 220 VAC / 240 VAC ($\pm 10\%$)
Input Frequency Range	47 to 63 Hz
Maximum AC Input Power	250 W
Maximum AC Input VA	350 VA

Environmental Conditions

Operating Temperature Range	0 to 55 °C
Storage Temperature Range	-40 to 75 °C
Cooling System	Internal fan cooling

Physical Characteristics

Form Factor	2U, full rack width
Rack Width	425.5 mm
Rack Height	88.1 mm
Rack Depth	364.4 mm
Net Weight	16.3 kg (36 lb)
Shipping Weight	19.5 kg (43 lb)

Performance

Voltage Drift (8-Hour Stability)	0.03% + 2 mV
Current Drift (8-Hour Stability)	0.03% + 2 mA
Output Voltage Overshoot	< 50 mV (Fast Mode) / < 10 mV (Normal Mode)
Programming Upward Transition Time (Fast Mode)	4 ms
Programming Upward Transition Time (Normal Mode)	40 ms
Programming Downward Transition Time (Fast Mode, Full Load)	3 ms
Programming Downward Transition Time (Fast Mode, No Load)	5 ms
Programming Downward Transition Time (Normal Mode, Full Load)	40 ms
Programming Downward Transition Time (Normal Mode, No Load)	250 ms
Warm-Up Time	30 minutes

GPIO / Remote Control

GPIO IEEE-488 Interface Capabilities	SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, C0, E1
--------------------------------------	---

Electrical Input

Input Current (120 VAC)	2.7 A
Input Current (240 VAC)	1.4 A

Control & Interface

DFI Response Time	< 15 us (with Option 760)
-------------------	---------------------------

Power

AC Input Fuse Rating	3.15 A slow-blow (100/120 VAC) / 2.0 A slow-blow (220/240 VAC)
----------------------	--

Interfaces

GPIO Address Range	0 to 30 (rear-panel switch selectable)
--------------------	--

TECHNOLOGY

Linear

APPLICATIONS

Automated Test Equipment (ATE), Precision DC Powering, Battery Simulation

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.