KEYSIGHT TECHNOLOGIES (AGILENT HP)

# M8195A

Keysight Technologies M8195A is a high-speed arbitrary waveform generator (AWG) module for AXIe systems. It delivers up to 65 GSa/s sampling with 8-bit resolution for wideband RF/microwave and high-speed digital signal generation in modular test setups.

## SPECIFICATIONS

### General

| | |
|---|---|
| Interfaces | AXIe (PCIe backplane via Keysight AXIe chassis); front-panel analog/clock/trigger I/O |
| Display | None (AXIe module) |

### Physical

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|---|---|
| Power Supply | Powered via AXIe chassis backplane |

### Core Performance

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|---|---|
| Maximum Sample Rate (per channel) | 65 GSa/s |
| Vertical Resolution | 8 bits |
| Analog Bandwidth (–3 dB) | 20 GHz |

### Analog Output and Spectral Performance

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|---|---|
| Output Impedance | 50 Ω |
| Output Mode | Single-ended, 50 Ω |

### Clocking and Timing

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|---|---|
| Internal Sample Clock | Up to 65 GSa/s |
| Reference Clock Input Frequency | 10 MHz |

### Triggering, Gating, and Markers

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|---|---|
| External Trigger Input | Supported (front panel) |
| Trigger Sources | Software, external |

### Connectivity and Interfaces

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|---|---|
| Form Factor | AXIe modular instrument |
| Compatible AXIe Chassis | Keysight M9502A, M9505A, M9514A |
| Host/Controller Interface | PCIe via AXIe chassis to host PC |
| Remote Control Interfaces | LAN to AXIe chassis controller; PCIe host link |

### Software and Programming

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|---|---|
| Soft Front Panel/GUI | Provided (Keysight M8195A application) |
| SCPI Command Set | Supported |
| Programming Language Support | SCPI over VISA (e.g., C/C++, Python, MATLAB, LabVIEW) |
| Supported Operating Systems | Windows (via Keysight IO Libraries Suite) |

### Modulation and Signal Generation

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|---|---|
| Arbitrary Waveform Support | User-defined waveforms |

### Options and Accessories

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|---|---|
| Multi-Module Synchronization | Supported |

### Physical and Power

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|---|---|
| Cooling Requirements | Chassis-provided forced-air cooling |