TEKTRONIX

AWG7122C

The Tektronix AWG7122C is a high-performance 2-channel arbitrary waveform generator from the AWG7000C Series, offering sample rates up to 12 GS/s (24 GS/s interleaved) and 10-bit vertical resolution. Designed for advanced research, high-speed serial data communications, RF/wireless design, and radar testing, the AWG7122C delivers exceptional signal fidelity, fine edge-timing resolution down to 100 fs, and up to 7.5 GHz analog bandwidth.

SPECIFICATIONS

General

Display	10.4 in (264 mm) TFT color LCD touchscreen, 1024×768 XGA resolution

Physical

Power Supply	100 to 240 V AC, 47 to 63 Hz, 450 W maximum
Operating Temperature	+10 to +40 °C °C
Weight	19 kg kg

General System Specifications

Architecture	Arbitrary Waveform Generator
Number of Channels	2
DAC Resolution	10 bits (without markers) / 8 bits (with 2 markers per channel)
Maximum Sample Rate	12 GS/s (24 GS/s interleaved mode)
Sample Rate Resolution	8 digits

Signal Fidelity & Performance

Vertical Resolution	10 bits (no markers) or 8 bits (with two marker outputs)

Output Characteristics

Output Impedance	50 Ω

Waveform Generation & Sequencing

Sequence Loop Count	1 to 65,536 or infinite

Clocking & Synchronization

Reference Output Frequency	10 MHz

Auxiliary Inputs & Outputs

Marker Outputs per Channel	2

Control & Interfaces

Display Type and Size	10.4 in TFT Touchscreen
GPIB Interface	IEEE 488.2 compatible
LAN Interface	RJ-45 connector, 10/100/1000 Base-T
Operating System	Windows 7

Environmental & Safety

Storage Temperature	-20 °C to +60 °C
Operating Altitude	Up to 3,000 m (9,843 ft)

Physical & Power Specifications

Form Factor	Benchtop / Rackmount (via optional kit)
Net Weight	19 kg (41.9 lbs)
Input Line Voltage	100 to 240 V AC
Line Frequency	47 to 63 Hz
Maximum Power Consumption	450 W

Performance

Interleaved Sample Rate	Up to 24 GS/s (Option 06)

Inputs & Outputs

Trigger Input Level Range	-5.0 V to +5.0 V
Trigger Input Impedance	50 Ω or 1 kΩ (selectable)
External Reference Input Level	0.2 Vp-p to 3.0 Vp-p into 50 Ω
USB Ports	USB 2.0 host ports (front and rear)
Output Connector Type	SMA Female
Output Configuration	Differential (Normal and Inverted SMA outputs per channel)

Operating Modes

Run Modes	Continuous, Triggered, Gated, Sequence

TECHNOLOGY

Arbitrary Waveform Generation

APPLICATIONS

High-Speed Serial Bus Testing, Advanced RF & Wireless Signal Generation, Radar & Electronic Warfare, Quantum Computing