

Specifications

Table 1: Acquisition Electrical Specifications

Characteristics	Specifications
Bandwidth	SD-22: 12.5 GHz typical SD-26: 20 GHz typical
Sampling Repetition Rate	
Maximum	200 kHz
Minimum	100 Hz
Rise Time	SD-22: 28 ps or less, 10% to 90% SD-26: 17.5 ps or less, 10% to 90%
Aberrations	
10 ns to 20 ps before step	±3% or less, typical
< 300 ps after step	+10%, -5% or less, typical
300 ps to 5 ns after step	±3% or less, typical
5 ns to 100 ns	±1% or less, typical
elsewhere	±0.5% or less, typical
Maximum Safe Input Signal Voltage	±3 V
Maximum Operating Input	1.6 V _{p-p} (AC plus offset)
Maximum Signal Voltage	1.0 V _{p-p}
Dot Transient Response	
Accuracy after calibration at operating temperature	±5% for signals up to 0.5 V _{p-p}
Adjustment Range	Adjustable to unity for signals up to 1.0 V _{p-p}

Table 1: Acquisition Electrical Specifications (Cont.)

Characteristics	Specifications
Displayed Noise SD-22	
Unity Dot Response	800 μV_{RMS} max, 400 μV typical
With Smoothing	400 μV_{RMS} max, 180 μV typical
SD-26 (SN B020440 & above)	
Unity Dot Response	1.2 mV_{RMS} max, 750 μV_{RMS} typical
With Smoothing	550 μV_{RMS} max, 350 μV_{RMS} typical
SD-26 (SN B020339 & below)	
Unity Dot Response	1.3 mV_{RMS} typical
With Smoothing	600 μV_{RMS} typical
Input Termination Impedance	50 \pm 0.5 Ω
Isolation Between Channels	\leq 1% p-p voltage transmission from the channel driven by the 067–1338–00 to the quiescent channel
Time Coincidence Between Channels	
Accuracy	10 ps
Stability	<0.2 ps/ $^{\circ}$ C

Table 2: Environmental and Mechanical Specifications

Characteristics	Specifications
Weight	314 grams (11 oz)
Height	71.05 mm (2.9 in)
Width	23.28 mm (0.95 in)
Depth	91.39 mm (3.8 in)
Ambient Temperature	
Operating	0° C to 50° C (32° F to 122° F)
Non-operating	-40° C to 75° C (-40° F to 167° F)
Altitude	
Operating	to 4.5 km (15,000 feet)
Non-operating	to 15 km (50,000 feet)
Humidity	to 95% relative humidity at up to 50° C (122° F)
MilSpec	Meets MIL-T-28800E, Type III, Class 5
Electromagnetic Compatibility	
United States	MIL-STD-461B: CE-03 Pt 4 Curve 1, CS-01 Pt 7, CS-02 Pt 4, CS-06 Pt 5, RE-02 Pt 7, RS-01 Pt 4, RS-02, Pt 5, RS-03 Pt 7 (limited to 1 GHz)