AstroNova™
Test & Measurement

Dash 20HF-HS and Dash 20HF Specifications

General	
Maximum Analog Waveforms	20 (4 isolated, 16 non-isolated)
Event Inputs	8 (TTL)
A/D Resolution	16 bit (separate A/D per channel)
A/D Sample Rate	500 kHz per channel
Frequency Response (Bandwidth)	100 kHz per channel
Anti-Aliasing Filter	4 pole Bessel
Pre-capture filters	Low pass, high pass, band pass, band stop, RMS
Post-capture filters	Low pass, high pass, band pass, band stop
User Engineering Units	Yes
Calibration	Semi-automated to external reference
Frequency Counter	Yes, on Channels 1 & 5
Frequency Accuracy	±0.005% of measurement
Isolated Voltage Input Channels (Channels 1-4)	
Input Type	Isolated, AC/DC coupled
Isolated Input Connector	Guarded banana jacks (red/black)
Max Rated Input	250 Vrms or DC, Cat II
Max Transient Input	±800 V (not to exceed 250 Vrms)
Isolation	250 Vrms or DC, Cat II (channel to chassis, channel to channel)
Specified Ranges	100 mVFS to 800 VFS
Attenuator Ranges	1, 10, 50, 200 and 400 Volt
Accuracy	± 0.07% of attenuator

Intrinsic Noise (pk-pk)	<0.2% of attenuator
Input Impedance	1 MΩ
Non-Isolated Voltage Input Channels (Channels 5-20)	
Input Type	Differential, non-isolated DC coupled
Differential Input Connector	25-pin D-sub male connectors (2 per unit, 8 channels per connector)
Maximum Rated/Transient Input	+/-50 VDC (35 Vrms)
Specified Ranges	80 mVFS to 100 VFS
Attenuator Ranges	80, 200, 400 and 800 mV; 2, 4, 5, 10, 25 and 50 V
Accuracy	± 0.05% of attenuator (800 mV; 2, 4, 5, 10, 25 and 50V attenuators) ± 0.25% of attenuator (80, 200 and 400 mV attenuators)
Intrinsic Noise (pk-pk)	< 6.25 mV (80, 200, 400 and 800 mV attenuators) < 0.33% of attenuator (2, 4, 5, 10, 25 and 50 V attenuators)
Input Impedance	250 kΩ
Data Acquisition Recording	
Operational Modes	Scope, Review, Real-time (strip-chart)
Recording Method	Internal 250 Gbyte disk drive, optionally removable (HS version)
Maximum Sample Rate	500,000 samples/second per channel
Minimum Sample Rate	100 samples/second per channel
Total Capacity	Over 100 billion samples
Data Stored	Raw (unfiltered) data saved to the drive
Time Stamp	Time and Date automatically saved with data
Trigger Point	Amount of pre and post trigger is user adjustable
Auto Re-Arm	Automatic stacking of captures

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Color Display	
Type	Active matrix color LCD (TFT)
Viewing Area	15.0 inch / 38.1 cm (diagonal)
Resolution	1024 x 768
Touch	Full screen, resistive
Interface	
Ethernet	10/100/1000BaseT
VGA	For displaying data on an external monitor
USB 2.0	For file upload using AstroVIEW X
Link Ports	For synchronizing data captures on up to eight systems
Power	
Input Voltage Range	100 to 250 VAC
Frequency Range	47 Hz to 63 Hz
Power Factor	0.99
Power Consumption	150W maximum
Physical	
Enclosure	Aluminum, with armored end caps
Dimensions	12.125” (30.8 cm) H x 16.0” (40.64 cm) W x 6.628” (16.84 cm) D (without handle)
Weight	24.5 lbs
Environmental	
Operating Temp	40 to 105 ºF (5 to 40 ºC)
Operating Humidity	10% to 90% non condensing
Compliance	

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Safety	EN 61010-1, 2nd Edition (2001), UL 61010-1:2004, 2nd Edition CAN/CSA C22.2 No. 61010-1:2004 2nd Edition
EMC	FCC Part 15, Subpart B, Class A; EN 61326-1 Class A
Power Harmonics	IEC1000-3-2

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