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KRYPTON®



TECHNICAL REFERENCE MANUAL

KRYPTON V20-2



5.9. LV: Low Voltage

Krypton LV modules are rugged isolated DAQ devices for low voltage measurements.

5.9.1. LV: specifications

KRYPTONi-4xLV, 8xLV

Analog input	KRYPTONi-4xLV	KRYPTONi-8xLV
Input type	Isolated voltage	
Number of channels	4	8
ADC Type	24-bit oversampled SAR with 41 kHz anti-aliasing filter	
Sampling Rates	Simultaneous 20k, 10k, 5k, 2k, 1k, 500, 200, 100 S/sec (software-selectable)	
Voltage Range	±50 V	
Accuracy	±0.03 % of reading ±5 mV	
Typ. SNR (10 kS/sec, -1 dBFS sine wave @ 1 kHz)	104 dB	
Typical noise floor @ 10 kS/sec	-106 dB	
Type. THD (10 kS/sec, -1 dBFS sine wave @ 1 kHz)	-104 dB	
Type. SFDR (10 kS/sec, -1 dBFS sine wave @ 1 kHz)	105 dB	
Typical CMR @ 400 Hz / 1 kHz	105 dB / 94 dB	
Gain Drift	Typical 10 ppm/K, max. 20 ppm/K	
Offset Drift	Typical 5 µV/K, max. 10 µV/K	
Gain Linearity	< 0.01 %	
Input Coupling	DC	
Input Impedance	1 MΩ	
Noise	0.7 mVRMS	
Overvoltage Protection	In+ to In-: 200 V continuous, 350 Vpeak (100 msec)	
Analog input performance		
Bandwidth (-3dB)	0.49 fs	
Alias-free Bandwidth	Bandwidth (-3 dB)	
Alias Rejection	-100 dB (all sample rates)	
Delay Through ADC	37 / fs	
Oversampling	32	
Additional Specifications		
Input Connector	BNC	
Isolation Voltage	1000 Vpeak channel/ground & channel/channel	
Environmental Rating (see 1)	IP67	
Amplifier type	KRYPTONi-4xLV	KRYPTONi-8xLV
Power Consumption	3.8 W	6.8 W
Weight	700 g	1000 g
Slice Dimensions	213 x 39 x 56 mm	213 x 54 x 56 mm
Dimensions with Connectors	213 x 39 x 66.8 mm	213 x 54 x 66.8 mm

1) Depending on the mating connector types

5.9.2. KRYPTONi-8xLV

KRYPTONi-8xLV has 8 BNC input connectors for voltage measurement.



KRYPTONi-8xLV

5.9.3. KRYPTONi-4xLV

KRYPTONi-4xLV has 4 BNC input connectors for voltage measurement.



KRYPTONi-4xLV