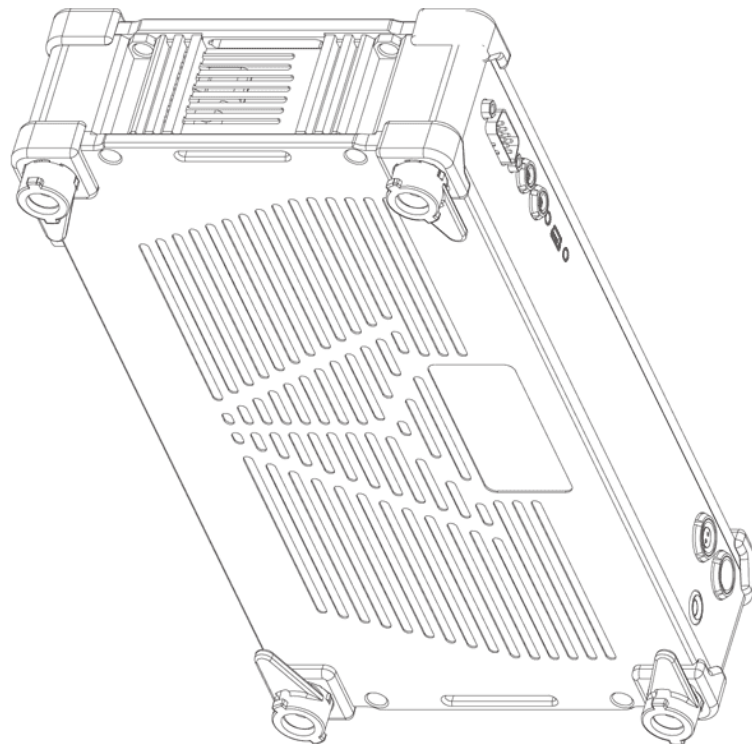
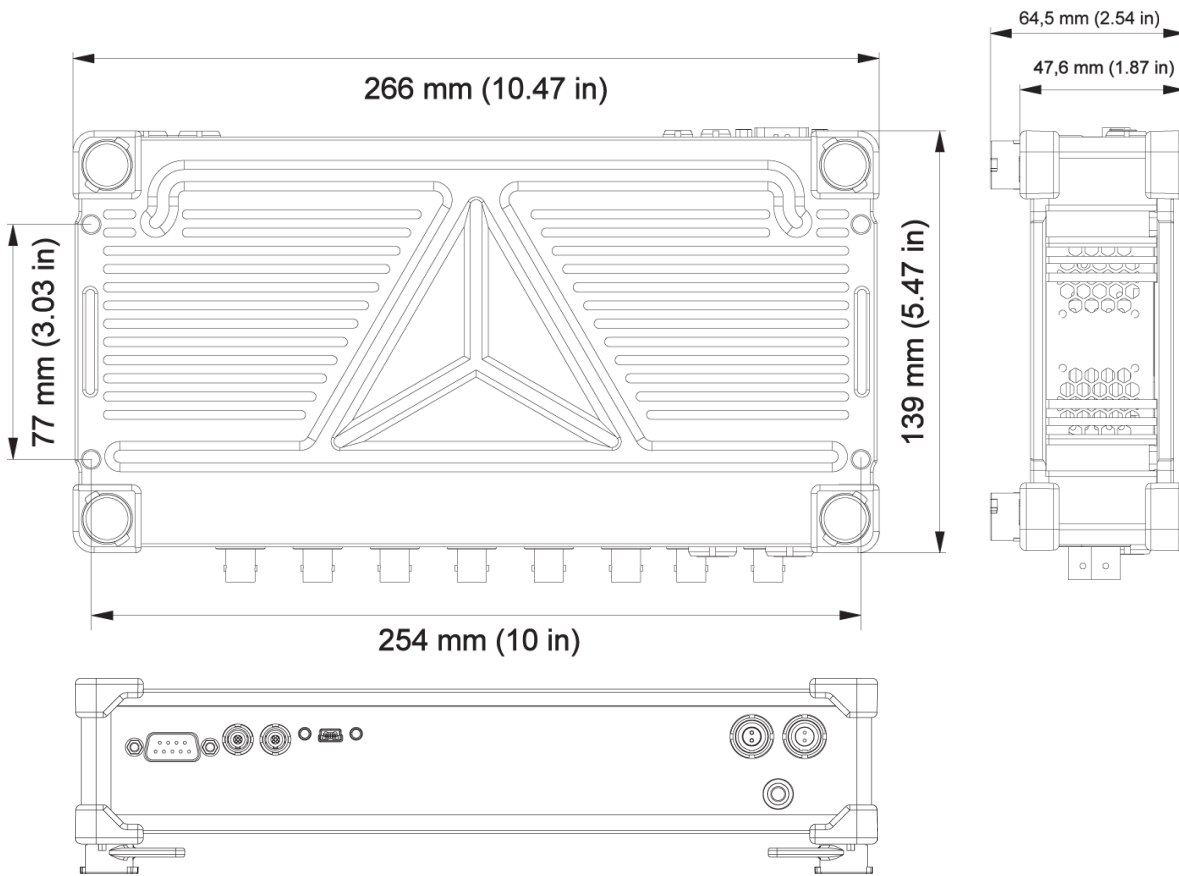


Технические характеристики SIRIUS®



Технические характеристики

Power	
Power Supply	9 - 36 V DC
Power consumption	Typ. 15 - 35 W
Environmental	
Operating Temperature	-10 to 50 °C (40 °C for fanless series)
Storage Temperature	-40 to 85 °C
Humidity	5 to 95 % RH non condensing @ 60 °C
IP rating	IP20 (IP50 for fanless series)
Shock & Vibration	Vibration sweep sinus (EN 60068-2-6:2008) Vibration random (EN 60721-3-2: 1997 - Class 2M2) Shock (EN 60068-2-27:2009) MIL-STD-810D
Питание	6-36 В (постоянное)
Макс. потребляемая мощность	30 Вт
Интерфейс	USB 2.0/EtherCAT
Масса	1000 г
Рабочая температура	от -20 до 50°C
Температура хранения	от -40 до 85°C
Относительная влажность	95%, без конденсации при 60°C
Acquisition rate	
Time base accuracy	Typical 5 ppm, Max: 20 ppm
Synchronisation	
Delay between slices	50 nsec
Max. Sync-cable length	100 m (Master/Slave), 200 m (IRIG)
EtherCAT®: Max. cable length	100 m
Sync Input / Output	
Level (Input/Output)	TTL compatible
Max. Output Current	±24 mA (±50 mA for 1 sec)

EtherCAT® specification

Interface	
Data interface	EtherCAT®
Data Rate	100Mbps Full Duplex bus speed
Max. Sample Rate	DualCore: 20 kS/sec, HD 10 kS/sec, HS 40 kS/sec
Max. Throughput per Chain	From 6MB/s to 10MB/s
Sync Accuracy	below 1 sample to Sirius®
EtherCAT®	Max. Cable Length 100m
Max. Number of Units	64 or more (power injectors may be required)
Data Interface Connection	LEMO 1T EtherCAT® hybrid cable Single cable for data, power and sync, daisy chainable

Counter specification

Counter	
Timebase	102.4 MHz
Time base accuracy Typical	5 ppm, Max: 20 ppm
Max. Bandwidth	10 MHz
Input Filter	500 ns, 1 µs, 2 µs, 4 µs, 5 µs and 7.5 µs
Input Level Compatibility	TTL (Low: <0.8 V, High >2 V)
Input Impedance	100 kΩ pull-up to +3.3 V
Input Protection	±25 Volt continuous
Alarm output	Open collector, max. 100 mA / 30 Volt
Sensor supply	5 V / 100 mA; 12 V / 50 mA

CAN specification

CAN bus	
Number of ports	1
Interface type	CAN 2.0B, up to 1 MBit/sec
Special applications	CCP, OBDII, J1939, CAN output
Galvanic isolation	Isolated (only on isolated motherboard)
Bus pin fault protection	±36 V
ESD protection	8 kV

Analog out specification

Outputs	Voltage		
DAC Type	24-bit delta-sigma		
Sampling Rate	Simultaneous 200 kS/sec		
Number Of Channels	8		
Function	File replay, conditioned AI output, FGEN (software option), channel output		
Specifications			
Full Scale	±10 V		
Analogue out bandwidth	40 kHz		
Accuracy	±0.1 % of reading ±0.02 V		
Temperature Drift	±50 ppm/K of reading ±200 µV/K		
Output configuration	Single Ended		
Typ. Noise floor @ 50 (200) kS/s output rate	-95 dB (-86 dB) @ 100 kHz Bandwidth		
Inter channel phase mismatch	$0.1^\circ * f_{out} [\text{kHz}] + 0.1^\circ$		
THD	< -90 dB @ 1 kHz, 10 V _{peak-peak}		
Output Impedance	< 1 Ω		
Maximum Output Current	20 mA		
Maximum load	> 1000 Ω		
Output Protection	Continuous short to ground		
Signal Delay	100 S/s...50 kS/s	50 kS/s...100 kS/s	100 kS/s...200 kS/s
Signal conditioning mode (see 1)	14 Samples + 50 µs	19 Samples + 2 µs	12 Samples + 35 µs
Additional Specifications			
Output connector	BNC		
1) SIRIUS-HD series does not support signal conditioning			

Dual core and High density filtering

Digital Filter (vs. Sample Rate)	0.1 kS/s...51.2 kS/s	51.2 kS/s...102.4 kS/s	102.4 kS/s...200 kS/s
Bandwidth (-3 dB)	0.494 fs	0.49 fs	0.38 fs
Alias-free Bandwidth	DC to 0.42 fs	DC to 0.32 fs	DC to 0.22 fs
Alias Rejection	-95 dB	-92 dB	-97 dB
Delay through ADC	12/fs	9/fs	5/fs
Oversampling	256	128	64