

TRION-BASE

- ▶ Counter, DIO and synchronization module
- ▶ Counter channels: 2 advanced counter
- ▶ Digital I/O: 8 DIO and 8 DI
- ▶ Synchronization
 - IRIG code B
 - DC I/O
- ▶ Additional features: 1 AUX socket (by default set to camera trigger)



Module specifications

TRION-BASE specifications		
Digital I/O specifications		
Number of channels	8 DIO + 8 DI	
Compatibility (input)	CMOS/TTL; 100 kΩ pull up	
Compatibility (output)	TTL, 20 mA	
Overvoltage protection	$\pm 30 V_{DC}$, $50 V_{PEAK}$ (100 ms)	
Sensor power supply (module total)	5 V (600 mA) and 12 V (600 mA)	
Connector	D-SUB-25 socket	
D-SUB-25 Sync OUT specifications		
Functionality	Acquisition clock and trigger output (can be used to sync two systems/enclosures)	
Compatibility (input)	LVTTTL	
Compatibility (output)	LVTTTL, 10 mA	
Overvoltage protection	$\pm 20 V_{DC}$	
Counter specifications		
Number of channels	2 advanced counter or 6 digital inputs	
Counter modes	<ul style="list-style-type: none"> – Waveform timing: Period, frequency, pulse width duty cycle and edge separation – Sensor modes: Encoder (angle and linear) – Event counting: Basic event counting, gated counting, up/down counting and encoder mode (X1, X2 and X4) 	
Compatibility (input)	CMOS/TTL	
Counter resolution	32-bit	
Counter time base	80 MHz	
Time base accuracy	Within DEWE2 system	Typ. 10 ppm; max. 50 ppm
	Within DEWE3 system	Typ. 2 ppm; max. 10 ppm
Maximum input frequency	10 MHz	

Tab. 60: TRION-BASE specifications

TRION-BASE



TRION-BASE specifications	
Overvoltage protection	$\pm 30 V_{DC}$, $50 V_{PEAK}$ (100 ms)
Sensor power supply (module total)	5 V (600 mA) and 12 V (600 mA)
Connector	LEMO 1B.307
AUX specifications	
Functionality	Camera trigger, trigger input/output, acquisition clock and programmable clock output
Compatibility (input)	LVTTTL
Compatibility (output)	LVTTTL, 10 mA
Overvoltage protection	$\pm 20 V$
Connector	SMB socket
Timing specifications	
Input sources	IRIG code B, DC
Input specification	
– Compatibility (DC code)	DC level shift TTL / CMOS compatible
– Impedance	20 k Ω
Output specification	
– Compatibility (DC code)	TTL, 20 mA
Adjustment range	± 150 ppm
Clock acc. IRIG locked	Without drift
Clock acc. IRIG unlocked	<1 ppm
Isolation voltage	350 V_{DC}
Connector	BNC socket
General specifications	
Typical power consumption	5 W
Temperature range	0–50 °C
Weight	Approx. 240 g

Tab. 60: TRION-BASE specifications