

STREAK CAMERA SWEEP UNIT

TSU22-10

Triggered Sweep Unit

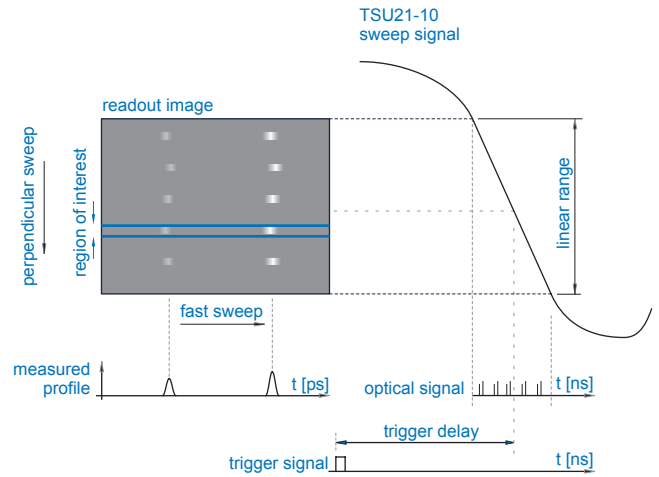


- Orthogonal sweep for SC-10 main unit
- 100 ns/mm to 5 ms/mm sweep speed
- 0 to 10 kHz trigger frequency
- High sweep speed linearity

Sweep Unit TSU22-10

The TSU22-10 sweep unit is used with the OptoScope SC-10 main unit to provide orthogonal deflection with regards to the first sweep direction. The sweep unit drives the second deflection plates.

Typically, first deflection plates are driven by fast synchroscan sweep unit. This results in double sweep measurements with fast sweep on the X-axis (synchroscan) of the readout image and a slow sweep (TSU22-10) on the Y-axis. Instead of using the full length input slit either part of the length or only a point source is used.

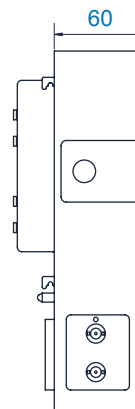
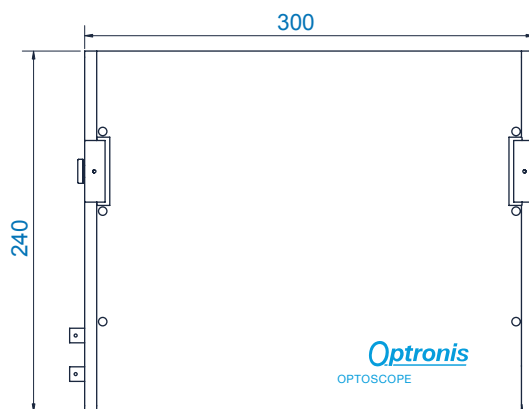


SPECIFICATIONS

Temporal resolution (single-shot)	10 ns (typ. FWHM)
Temporal jitter	<10 ns (rms)
Sweep frequency	0 to 10 kHz
Sweep speed accuracy	±5% (mean over 10 mm)
Sweep speed non-linearity	±2.5% typ. / ±5% max. (15 mm)
Operation modes	Sweep / Focus
Trigger signal input	>+2 V (Trise <20 ns, Tpw >20 ns)
Trigger signal input connection	BNC / 50 Ω
Trigger signal output	+2 V (typ. Tpw = time base)
Trigger signal output connection	BNC / 50 Ω
Temperature	0 - 35°C (op.) / -5 - +45°C (stor.)
Humidity	20 - 80% rel. non-condensing
Altitude	sea level up to 3000 m
Weight	3.3 kg (typ.)

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Sweep speed	Time base	Trigger delay (typ.)	Trigger freq. (max.)
100 ns/mm	1.5 μs	5.5 μs	10 kHz
250 ns/mm	3.75 μs	11 μs	1 kHz
500 ns/mm	7.5 μs	22 μs	1 kHz
1 μs/mm	15 μs	45 μs	1 kHz
2.5 μs/mm	37.5 μs	110 μs	100 Hz
5 μs/mm	75 μs	220 μs	100 Hz
10 μs/mm	150 μs	450 μs	100 Hz
25 μs/mm	375 μs	1.1 ms	10 Hz
50 μs/mm	750 μs	2.2 ms	10 Hz
100 μs/mm	1.5 ms	4.5 ms	10 Hz
250 μs/mm	3.75 ms	11 ms	1 Hz
500 μs/mm	7.5 ms	22 ms	1 Hz
1 ms/mm	15 ms	44 ms	1 Hz
2.5 ms/mm	37.5 ms	110 ms	0.1 Hz
5 ms/mm	75 ms	220 ms	0.1 Hz



All Dimensions in mm

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