

Ballistic Velocity Measurement System



3,330 measurements / second

Up to 9,000 measurements storage

5ns Resolution

3 independent input channels

4 independent output channels

The Specialised Imaging VT2 system performs time of flight and/or velocity measurements using 3 input channels.

Capture rates up to 3,330 measurements per second (200,000 rounds per minute) can be measured and up to 9,000 measurements can be stored locally in the Unit head.

The four independent Output channels can be used as a delay generator for other instrumentation to ensure correct triggering of framing, ultra high-speed and high speed video cameras.

FEATURES

- Velocity measurement
- Time of flight measurement
- Ethernet communication
- Built in 4 channel delay generator
- Battery powered option
- 19" Rack mount option

OPERATING PARAMETERS

Measurements	Time of flight or Velocity
Max. rate of capture/fire	200,000 measurements/minute (3,330 Hz)
Max. storage	9,000 measurements (velocity or time of flight)

INPUT / OUTPUT SIGNALS

Input/trigger channels	3 (independent) Electrical signal (BNC connector) Threshold variable from $\pm 25V$ Positive or Negative polarity, Make/Break 50 Ω or 1K Ω termination
Output channels	4 (independent) +ve TTL (BNC connector) Pulse width user programmable 50 Ω termination
Control interface	100Mbps Ethernet
Software	Custom software compatible with Microsoft Windows Operating Systems for Control and data archiving.
Electrical input	Mains 100-240V AC 50-60Hz Battery option (inc. charger)

TIMING PARAMETERS

System Clock	200MHz, quartz crystal controlled
Inherent Delay	50ns
Range	5ns to 1s in 5ns steps independently variable
Jitter (trigger)	$\leq 5ns$
Jitter (channel to channel)	0ns

MECHANICAL

Dimension mm (w/d/h)	360mm x 200mm x 77mm (with handles)
Dimension inches (w/d/h)	14.17" x 7.87" x 3.03" (with handles)
IP rating	IP65
Weight	4Kg (8.8lbs)

ENVIRONMENTAL

Storage temperature	-10°C to +50°C
Operating Temperature	-5°C to +40°C
Humidity	10 - 90% RH non condensing
Vibration shock	10 - 40 Hz Max. 10g in any direction
EMC	Meets all UKCA/EU harmonised standards



Rack mount option

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