

Ballistic Velocity Measurement System

**3,330 measurements /
second**

**Up to 15,000
measurements storage**

5ns Resolution

**3 independent input
channels**

**4 independent output
channels**



The Specialised Imaging VT 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 15,000 measurements can be stored locally in the Unit head.

The four independent Output channels can be used as a trigger adjustment unit for ballistic events to ensure correct triggering of framing, ultra high-speed and high speed video cameras.

FEATURES

- ☐ Velocity measurement
- ☐ Time of flight measurement
- ☐ Ethernet communication

OPERATING PARAMETERS

Measurements	Time of flight or Velocity
Max. rate of capture/fire	200,000 measurements/minute (3,330 Hz)
Max. storage	15,000 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 power	AC: 110-240V AC 50/60Hz or DC: 24V DC – Battery power

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) Inc. handles	23cm x 23 cm x 17cm (9.1" x 9.1" x 6.7")
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 EC harmonized standards

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