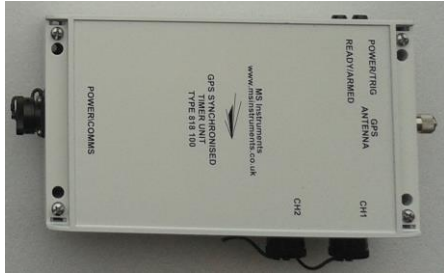




DUAL-CHANNEL GPS-SYNCHRONIZED TIMER TYPE 818-100

Simple, Direct Accuracy



DUAL-CHANNEL GPS SYNCHRONIZED TIMER TYPE 818-100

The Dual-Channel GPS Synchronized Timer Unit Type 818-100 is a precise, ARM based Processing instrument, which provides GPS time synchronized measurement of events. A typical application is Burst Time measurement.

The timer crystal has $\pm 5\text{ppm}$ accuracy and the GPS unit is time-synchronized to better than 300ns to UTC for all timing channels. This unit provides highly accurate and reliable measurements, which enable detailed ballistic analysis to be undertaken in the software.

HIGHLY ACCURATE AND RELIABLE

HARDWARE/SOFTWARE

- **Crystal-controlled chronometer channels** each have a time resolution of 100 nanoseconds from channel to channel, producing high accuracy time measurements.
- **Two Independent Chronometer Channels** each provide velocity or time-of-flight and rate-of-fire.
- **Integrated Software Package** is available, providing accuracy, velocity, rate of fire.
- **Software** allows for remote control of the unit, and retrieval of all data, which may be stored to disk and printed out.
- **Muzzle Velocity** and intermediate velocities are all calculable using the Ballistic Coefficient, where known.

SPECIFICATION

HARDWARE	
Frequency Standard	<ul style="list-style-type: none"> • 10MHz crystal oscillator • Stability of 0.0025% over temp range -20°C - +80°C • Long term stability $\pm 0.5\text{ppm}$ Stability. • Ageing of $\pm 1\text{ppm}$ per year
Store Capacity	<ul style="list-style-type: none"> • 256 Velocity/Time measurements • 257 Rate of Fire measurements
Rate of Fire	30,000 rpm max.
POWER/COMMS	
Power	10V-36V DC
Connections	<ul style="list-style-type: none"> • Up to two Detectors Type 858/726/768/588/818 • TTL and Make/Break • Data connection to processor • GPS Antenna
ENVIRONMENT	
Operating Temperature	-10°C - +50°C [14°F - 122°F]
DIMENSIONS	
L x W x H	260mm x 150mm x 90mm [10.2in x 5.9 in x 3.5in]
Weight	2.1kg [4.6lbs]

USED WITH



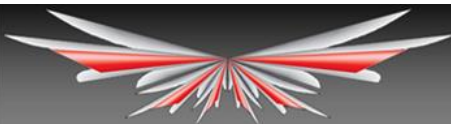
Acoustic Detector Type 588



Flash Detector Type 768



Optical Detector Type 858



MS INSTRUMENTS Range Consultancy

Precision, Expertise, Quality

- Professional Bespoke Range Designs
- State-of-the-Art Product Rendering
- Only the Latest Standards



MS Instruments Ltd.

Unit 4, Ravensquay Business Centre, Cray Avenue
 Orpington, Kent, BR5 4BQ, United Kingdom
 Tel: +44 (0)1689 883 020
 Fax: +44 (0)1689 871 392
 contact@msinstruments.co.uk
 www.msinstruments.co.uk

ISO 9001 SCS cert. No. 980010
 818-100-dual-channelgps-synchronizedtimer – Jan 15

The information in this document is correct at the stated time. MS Instruments Ltd has a policy of continuing development and reserves the right to make design changes/improvements to the products.