

SLICE GPS Accessory Kit

GPS Location, Velocity and Time Accessory for SLICE DAS

APPLICATIONS

- Vehicle track testing
- Aerospace analysis
- Asset monitoring
- Blast testing
- Acoustic monitoring
- Embedded monitoring
- Structural health monitoring



PRODUCTS

DTS offers a full line of rugged data acquisition systems and smart sensors for dynamics testing.

WORLDWIDE SUPPORT

HELP CENTER (24/7/365 Access)
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Description

The DTS SLICE GPS Accessory Kit brings accurate GPS time and location capabilities to the SLICE data acquisition product line. Location, time and velocity information are provided through a standard NMEA data stream and a 1 PPS time signal is captured by the SLICE DAS channels. Software post-processing provides channel-to-channel synchronization, as well as data alignment with location, network time and measurement data.

Features

- Kit includes GPS receiver, break-out cable, configuration cable, two power option cables
- Simple cable connections support SLICE NANO, SLICE MICRO, SLICE IP68 and SLICE PRO data acquisition systems (DAS sold separately)
- Software utility for aligning GPS data and time to SLICE analog channel data
- Rugged mounting options for GPS receiver
- Within $\pm 1 \mu\text{s}$ time alignment across all DTS data channels (subject to limitations of the sample rate)
- Provides time, date, latitude, longitude, velocity, elevation and other measurement data in standard NMEA format

Specifications

GPS	
Size:	96.1 mm diameter, 49.5 mm height
Weight:	201 g
Mounting Method:	Pole, Panel
Compatibility:	SLICE MICRO, NANO, IP68 SLICE PRO (via cable options)
Cable:	9.14 m
Power:	40 mA @ 12 V
Acquisition Time:	<2 s Reacquisition, 1 s Hot, 38 s Warm, 45 s Cold
Accuracy:	<3 m 95%, 0.1 kt RMS steady (WAAS)
Precision Time:	$\pm 1 \mu\text{s}$ (subject to SLICE sample rate)
Coarse Time:	<1 s
Measurement Range:	2 g, 999 knots max, altitude >60000 ft.
Update Rate:	1 s
ACCESSORY KIT POWER	
Voltage Input:	8-33 V from SLICE or external power
ENVIRONMENTAL	
Operating Temp.:	-30 to 80°C
SERIAL PORT AND NMEA	
Voltage:	RS-232 levels
Update Rate:	1 Hz
Default NMEA:	RMC @ 1200 baud
NMEA Configuration:	Source code and programming cable is provided for the user to experiment with different NMEA sentences (e.g., GGA, GSV, VTG), baud rates (e.g., 4800, 19200) and update rates (e.g., 1 Hz or 5 Hz). The baud rate sets the minimum DAS sample rate.