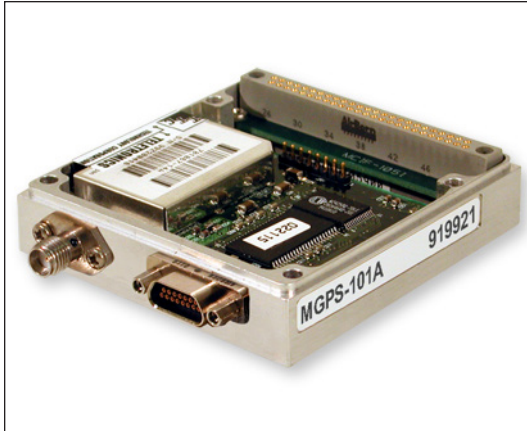


### Miniature GPS Position/Time Code Generator Module



#### Applications

- Flight test instrumentation
- Wideband testing, structural analysis, ...
- Physical research and experimentation

#### Features

- GPS time code reader/generator module
- IRIG-B output time format
- Accepts input from active or passive GPS antennas
- Accepts IRIG-B AC or DC inputs
- Generates IRIG-B DC and AC outputs
- Use for frame time tagging, bus word time tagging
- Generates status words for transmission in PCM
- Latitude, longitude, altitude, velocity and course output
- New position/velocity/course data every 250 msec.
- Compatible with MEDAU/MCDAU-2000 system
- "Flywheel mode" (runs on internal oscillator)
- Mission "Elapsed time" mode (external reset)
- External battery backup provisions
- Time compatible with IRIG-106-96
- Microsoft Windows application software included

#### Description

The MGPS-101A module provides GPS time, position and velocity capability to the MEDAU-2000 miniature E-Bus data acquisition unit or the MCDAU-2000 miniature CAIS bus data acquisition unit. The module can be placed in either a master or remote unit and will provide time code capability for the modules within that particular stack. The module accepts an input from an active or passive GPS antenna. Alternatively, it can accept IRIG-B DC (unmodulated) or IRIG-B AC (modulated) time code inputs. Whatever the time code input source, the module provides frame time tagging, and in addition, provides per-word or per-message time tagging capability for certain I/O modules in the stack that acquire bus data (e.g. 1553, ARINC-429, RS-232, etc.). The MGPS-101A module also provides IRIG-B DC and AC time code outputs for cascading purposes. All encoded time words furnished by the MGPS-101A module comply with IRIG-106-96, Chapter 4 requirements for "high time", "low time", and "micro time" formats. The module also has a built-in microprocessor and ADC to measure and encode the internal MEDAU-2000 system temperature and internal voltage rails within the host MEDAU-2000 encoder.

Revision 05/12/2015

#### MGPS-101A Datasheet

©2015 Teletronics - A Curtiss-Wright Company  
Specifications subject to change without notice.

Approved for Public Release 16-S-0439



CAIS  
Compatible



Management  
System  
AS9100C  
ISO 9001:2008

Teletronics - A Curtiss-Wright Company  
15 Terry Drive, Newtown, PA 18940  
phone: 267.352.2020 fax: 267.352.2021 Sales@ttcdas.com

[www.ttcdas.com](http://www.ttcdas.com)