

ED3

US Army Lead Platform for M-Code Integration

Enhanced Defense Advanced Global Positioning System Receiver Distributed Device (Enhanced D3)

KEY FEATURES

- One device that replicates four independent AN/PSN-13A (DAGR) receivers, all operating as separate units with unique or different criteria.
- Supports rapid, LRU level interchangeability between SAASM capable D3 and M-Code capable D3.
- No Impact to Subscriber Application Software/Hardware
- Commercial Off The Shelf (COTS), enabling ease of procurement
- Internal, rechargeable supercapacitor, eliminates need for lithium battery
- Optimized for SWaP, compatible with all DAGR accessories, including mount
- All four COM2 ports are configurable to RS232 or RS422.

Seamless Transition from SAASM to M-Code

The Enhanced D3 distributes centralized IS-GPS-153 and MSID messages to up to 8 independent, unique interfaces. It is designed and qualified for the mounted environment. Supported clients include tactical radios, FBCB2/BFT, Laptop/Falconview, MRT's and others.

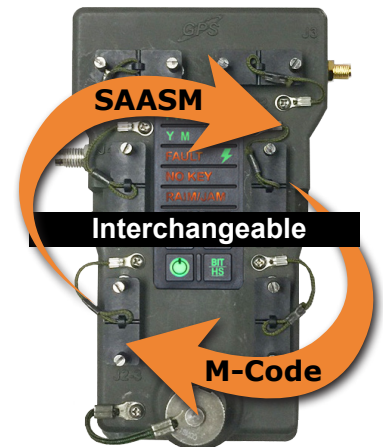
As the newest addition to the family of D3 Devices, the Enhanced D3 can provide SAASM or M-Code protected GPS data.

One Enhanced D3 can perform the function of eight independent MGUE's. This eliminates requirements for multiple MGUE's and associated antennas, creating an affordable migration plan from SAASM to M-code receivers, while reducing SWaP and system design complexity.

Export of GPS Source products may be subject to U.S. Export Controls, U.S. Export license may be required.

M-Code available upon GPS Directorate approval of M-Code Receiver cards

- Offers unique scalability and upgradeability path from SAASM to M-Code using existing vehicle architecture and components, saving time and money.
- One SAASM or M-Code card for all vehicle clients
- Eliminates lithium backup battery requirements
- LRU is depot level upgradeable from SAASM to M-Code
- Enhanced compatibility with Anti-jam antennas operating in any mode





Electrical Input:

28VDC Operating Input Voltage
 Range: 9V-32V (1.8W - 6.4W)
 Antenna Load Current Range: 2-70 mA
 Current: 200MA max (3W - 8W)
 Assumes 250mA Type II GB-GRAM
 (Numbers may be different depending on configuration)
 Supports MIL-STD-704G and MIL-STD-1275D

Electrical Output:

Antenna Output Voltage: 3.3V

Interfaces:

J2-1, J2-2, J2-3, J2-4 ports support both standard TIA/EIA-232 (COM1) serial data ports and standard TIA/EIA-422 (COM2) serial data ports (COM2 ports can also be TIA/EIA-232)

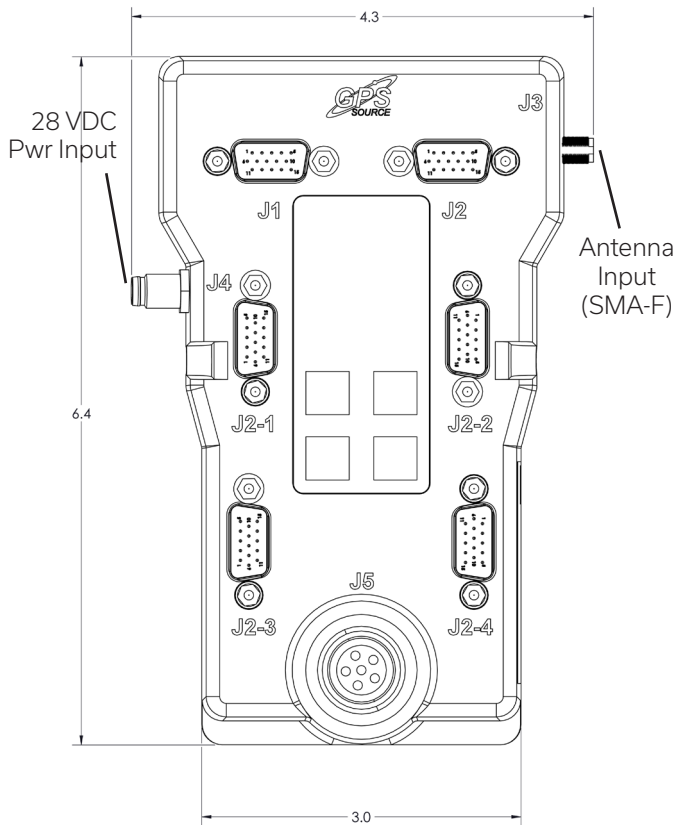
8 Timing Interfaces Available:

1 PPS input
 1 PPS UTC, 1PPS T-Mark and 10 PPS output
 HAVEQUICK output
 One SINCGARS mode 3 interface
 DS-101/DS-102 key loading input (SAASM)
 DS101 only key loading input (M-Code)

Dual Frequency:

L1/L2 dual frequency tracking
 L1 - C/A, P(Y), M*
 L2 - P(Y), M*

*M-Code only available with an M-Code capable receiver card



Physical Specifications:

Total Weight: 1 lb.
 Overall Size: 3.74 in x 6.37 in x 1.64 in
 Fits within envelope of DAGR in DAGR Installation Mount

Compatibility:

IS-GPS-153, IS-GPS-164, MSID-001A
 NMEA-0183 output

Environmental:

Operating Temp: -40°C to +71°C
 Humidity: 95% Per MIL-STD-810, Method 507.5 Proc. II
 Vibration: Per MIL-STD-810, Method 514.6, Proc. I
 Altitude: -400m to 3,048m MSL
 Crash Safety Shock: 75 g's Per MIL-STD-810G, Method 516.6, Proc. V
 Functional Shock: 40 g's Per MIL-STD-810G, Method 516.6, Proc. I
 Sand and Dust: Per MIL-STD-810G, Method 510.5, Proc. I & II

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 NAICS: 334220, 334290, 334511, 541330, 541690

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