Design Offers Breakthrough Flexibility

EMCORE’s TACNAV Universal Multilingual Display (UMD) offers tactical display technology capable of presenting navigation information in multiple languages for both commanders and drivers. TACNAV UMD is also designed to be backwards compatible with TACNAV systems in the field.

The TACNAV UMD offers an active dot-matrix design, delivering unparalleled flexibility. Each TACNAV UMD is capable of displaying easy-to-understand icons, and pop-up menus, all of which can be configured to display the specific data that the user requires.

Since each TACNAV UMD can be programmed as either a commander or driver display, the UMD is interchangeable with both these formats in existing TACNAV installations, and is compatible with new and future TACNAV systems. A TACNAV system is capable of displaying information in two languages simultaneously, so some system UMDs can display in Arabic while others display in English, enhancing joint multinational operations.

With its versatility and affordability, the TACNAV UMD is ideal for any military vehicle requiring a user-friendly interface for its tactical navigation system. The TACNAV UMD is also the perfect solution for presenting data available from digital Battlefield Management Systems (BMS).

Key Features and Attributes

- The world's first multilingual display for tactical navigation systems
- Capable of displaying pop-up menus, configuration data
- Generation III NVG-compatible
- Four “soft keys” for easy operation
- Interchangeable Commander's and Driver's Displays, reduce logistics cost
- Meets stringent military standards
- Multiple UMDs operating in two different languages from the same TACNAV system

The TACNAV UMD improves operational efficiency by providing the vehicle commander and crew with the data they need, in the format and language they require.
The TACNAV UMD is capable of:

**Displaying Navigation Data**

- **Operational/Physical**
  - **Input Voltage:** +28 VDC, nominal (MIL-STD-1275A)
  - **Power:** 11.2 watts (max)
  - **Weight:** 1.1 kg (2.25 lbs)
  - **Size:** 127 mm (h) x 124 mm (w) x 44.5 mm (d) (5.0” x 4.88” x 1.75”)
  - **Connector Type:** MS3112E10-6P
  - **Data Interface:** EIA Standard RS-422/Tx/Rx/Power/6-wire
  - **Data Rate:** 9,600-115,200 baud

- **Environmental**
  - **Altitude:** 17,000 meters (56,000 feet)
  - **Environment:** MIL-STD-810D: humidity, salt fog, sand, dust & fungus

**Displaying Data in Many Languages**

- **English**
- **French**
- **Arabic**

System Diagram

**Technical Specifications**

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  - **Data Rate:** 9,600-115,200 baud

- **Environmental**
  - **Temperature:** MIL-STD-810D, Meth. 501.2/502.2: -32°C to +60°C (-26°F to +140°F); 10 minute display warm-up needed below -20°C (+4°F)
  - **Shock:** MIL-STD-810D: 40g, half-sine wave form for 11 ms applied to 3 mutually orthogonal axes for 18 shock pulses
  - **EMI/RFI:** MIL-STD-461C, Table 4-1, Class A3, digital equipment
  - **Vibration:** MIL-STD-810D, Meth. 514 Category 8 - Random vibration to 3 mutually orthogonal axes for 60 minutes/axis
  - **Service Life:** 10 years
  - **MTBF:** 40,000 hours

For More Information

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