

## Data Display Transfer Units

The Data Display Transfer Unit (DDTU) includes a 2-line, 16-character LED display with six control switches for uploading and downloading data via removable media. Three versions of the DDTU are currently available.

- DDTU-MIO includes two USB ports, Compact Flash (CF) and Secure Digital (SD) card slots, and RS-422/RS-232 and Ethernet interfaces.
- DDTU-PC includes a PCMCIA card slot and an RS-422/RS-232 interface.
- DDTU-SW includes a Compact Flash (CF) card slot, and four ON/OFF power switches (for other LRUs on the aircraft) replace the LED display. An Ethernet interface is optional.

### Optional Features

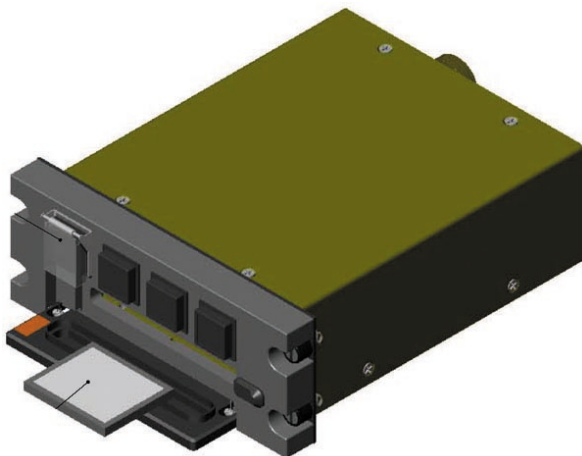
- Communication with a variety of military and commercial avionics systems
- Night vision (NVIS) compatibility to MIL-STD-3009
- Customization



*DDTU  
(door closed)*



*DDTU-MIO  
(multi-I/O version)*



*DDTU-SW  
(power switch version)*



*DDTU-PC  
(PCMCIA version)*

### General Data

Part Number	16300-xx
Power Supply	Protected from reverse polarity input (MIL-STD-704C)
Standards	Transient voltages (MIL-STD-704C)
Weight	< 2.73 Kilograms
Mechanical Interface	DZUS® rail mount per MS-25212
Cooling	Natural convection
Switches	6 switches standard (custom options)
DDTU-SW	4 ON/OFF power switches
BIT Mode	Built-in test pattern

### System Interface

Interfaces	
DDTU-PC	RS-422/RS-232
DDTU-MIO	PCMCIA; Single-height card slot
	RS-422/RS-232/USB
	Compact Flash; up to 137 GB
	Secure Digital card (SD and SDHC); up to 32 GB
DDTU-SW	Ethernet; 10/100
	Compact Flash; up to 137 GB
	Ethernet; 10/100 (optional)
Connector	Circular MIL-C-38999

### Power

Display	18–32 V DC (28 V DC nominal)
Switch Illumination	5 V AC (dimnable via aircraft bus)

### Power Consumption

Display	14 Watts
Switch Illumination	3 Watts maximum

### Environmental

Temperature	-40°C to +70°C (MIL-STD-810)
Storage Temperature	+90°C to -54°C (MIL-STD-810)
Humidity	95% non-condensing (MIL-STD-810)
Vibration	Per MIL-STD-810E, Notice 2, Method 514.4
Shock	20 Gs, 6–9 ms (3 axis)
Altitude (Operational)	Up to 50,000 ft non-pressurized
EMI / RFI	Air limits: DCE01-03, DCS01-05, DRS01-02 Sea limits: DMFS01, DRE01-02
MTBF	24,000 hours

### Electro-Optical

Display Type	Green LED, 5 x 7 alphanumeric
Display Configuration	2 rows, 16 characters (custom options)
Character Dimensions	.190" H x .112" V (4.83 mm x 2.85 mm)
Chromaticity	NVIS per MIL-STD-3009, Type 1 Class B
Intensity	NVIS per MIL-STD-3009, Type 1 Class B
Contrast	NVIS per MIL-STD-3009, Type 1 Class B
Viewing Angle	±45°H x ±45°V

### Options / Upgrades

Illuminated Display Color	Red or green
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