

Data Entry Display with NVIS Compatibility

The Data Entry Display unit includes 5 rows of alphanumeric characters with 24 characters in each row, for a total of 120 characters. It is compatible for use in Night Vision Imaging Systems (NVIS) and accepts Manchester II encoded data. The unit is used in the F-16 aircraft as a message center for communication, warning, and annunciator functions.



General Data

National Stock Number (NSN)	5895-01-593-8172
Part Number	19450-01
Power Supply	Protected from reverse polarity input (MIL-STD-704C)
Standards	Transient voltages (MIL-STD-704C)
Weight	< 3 pounds
Mechanical Interface	DZUS® rail mount per MS-25212
Cooling	Natural convection
Display	120-character, 5 x 7 LED pixels
BIT Mode	IBIT / CBIT

System Interface

Interface (Serial)	Manchester II serial data bus
Data Input	Maximum: 1 Mbit/sec Typical: 500 Kbit/sec
Reset	True low; Minimum duration 10 ms
Clock Input	Maximum: 15 MHz Duty Cycle: 50% Tolerance: ±0.1%
Failure Outputs (FLT, LED FLT)	Detects during display test for 2 or more LEDs

Qualification (MIL-STD-810)

Temperature	-40°C to +70°C
Storage Temperature	+90°C to -54°C
Humidity	95% non-condensing
Vibration	Method 514.4, Notice 2
Shock	20 Gs, 6-9 ms (3 axis)
EMI / RFI	DCE01-03, DCS01-02, DCS01-02, DRE01-02
MTBF	24,000 hours
Safety of Flight Testing	103 hours

Electro-Optical

Display Type	Green LED, 5 x 7 alphanumeric
Display Configuration	5 rows, 24 characters
Character Dimensions	.190" H x .112" V
Chromaticity	NVIS per MIL-STD-3009
Intensity	NVIS per MIL-STD-3009
Connector	MIL-C-38999
Viewing Angle	±45°H x ±45°V

