6883 MCDU

Multi-Function Control Display Unit

Providing a control display unit interface to flight management and other avionics subsystems

GE's 6883 MCDU series provides high utility and broad functionality to act as an interface unit to support various rotorcraft and fixed wing aircraft applications for both military and civil applications. For over 40 years, GE has designed, developed, and integrated MCDU Display Units for various aircraft around the world. It has a TSO to simplify certification in new or legacy aircraft. It communicates using ARINC 739 protocols over an ARINC 429 bus.

GE has incorporated advanced display technology in its display product line. Its design offers improved reliability together with reduced size, weight, and power consumption, which results in reduced overall cost of ownership. A multi-touch touchscreen version is under development to provide a flexible graphical user interface (GUI), increase reliability and to reduce pilot workload.

Benefits

- Full color LCD maximizes visual presentations
- Communication using standard interfaces: ARINC 739, ARINC 615, ARINC 429 and RS-422
- TSO to simplify retrofit and OEM certification
- DO-178, DO-254 & D0-160
- Spare processing to facilitate incorporation of added functions
- On-aircraft software upload
- Large touchscreen display option for flexible GUI
- Proven designs with over 10,000 units fielded
- Passive convection cooling
- Communicates with multiple Flight Management Computers and additional ports for communications with other aircraft subsystems

Applications

- Global Positioning System (GPS)
- CNS/ATM
- Bitmap uploading
- ACARS
- Weather radar
- Flight management system
- SATCOM
- Radio communications control
- Video
- Secondary TCAS
- Moving map display
- Free flight /ADS-B

Features

Specifications

Interfaces
ARINC 739/739A MCDU
5.6" diagonal VGA (640 × 480) display
7 ARINC 429 inputs (+1 optional)
1 ARINC 429 output (+1 spare/+2 optional) 0
to 5/28v AC/DC lighting input
0 to 28v AD/DC annunciator 8 discrete
inputs (+8 spare)
2 discrete outputs (+8 spare)
1 video input (NTSC/PAL)
Unit power: 28 VDC, 1.5 Amps (-20oC)
Heater power: 28 VDC, 2 Amps* (-40oC)

*Heater power applied through separate rear connector pins
Spare indicates hardware components are populated, but no software is implemented
Optional indicates hardware circuitry is present, but hardware components are not populated

Refresh Capabilities
- Low SWAP-C
- A/C interfaces: ARINC-429, Ethernet, RS-232/422, discrete
  IO and video in & out (A818, SDI, or other)
- Large multi-touch touchscreen display for flexibile GUI

Features and Characteristics
Black/Gray bezels
Non-NVIS or NVIS B options
Weather graphics bit map files
Size: 7.125" x 5.75" x 7.2"
14 lines of 24 characters text mode
Navigation radio tuning
TSO certified (C113A)
DO-178, DO-254 & D0-160
Weight: 6.78 lbs max
Operating temp: (-40oC to +70oC)
Vibration: Fixed-wing & helicopter

GE Aerospace
3290 Patterson AVE SE, Grand Rapids, MI 49512

+1 616 241 7000
Inquiries: Connected.Aircraft@ge.com
www.geaerospace.com