CDU

Cockpit Display Unit

NIRON
Systems & Projects

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Functional Description

The CDU is a full MIL-SPEC Cockpit Display Unit with user friendly HMI interface between the helicopter/aircraft crew and the avionics system. Using the CDU OSS pushbuttons, the aircrew can select and control the avionics systems including selection of modes/sub-modes, data entry and editing, self-test, and more.

The CDU supports various communication protocols with the mission computer and the avionic systems such as : MIL-STD-1553 or ARINC 429, RS-422, RS232, Can Bus, Ethernet (internal 4/8 port switch is optional), USB, The CDU support up to 16 GPIO, A/D and D/A.

The CDU has built-in data storage capabilities and can drive a secondary display unit.

Data interface for mission parameters up/downloading capability is optionally available using a USB flash memory device.

Front panel characteristics

Monitor

- ◾ Display: 5" diagonal high-brightness 800*480 dpi color Active Matrix LCD (AMLCD) screen
- ◾ The CDU Display is fully sunlight readable and NVG compatible, with LED backlighting
  Viewing angles:
  - ▪ Horizontal angle (min.): ±40 degrees
  - ▪ Vertical angle (min.): ±35 degrees
  - ▪ Shades of grey: at least 64 grey levels
- ◾ Supported video inputs: DVI, RS-170 PAL/NTSC
- ◾ External Video input Switching and video display

Bezel

- ◾ Bezel keys - Fully tactile, MIL-STD, NVG compatible
- ◾ Hot keys - Dedicated hot keys provide for direct access to primary pages
- ◾ A data erase pushbutton is optionally available

Bezel and display customization according to customer requirements

About Niron Systems & Projects

Niron Systems & Projects is a recognized provider of sophisticated technological solutions for defense and Homeland Security applications. With many years of accumulated experience backing a strong command of the most advanced modern technologies, company engineers specialize in the development and production of integrated solutions for a variety of manned and unmanned airborne, ground, and surface naval platforms. These include control systems for weapon delivery and Chaff & Flare Dispensing Systems; mission and communication computers; display and switching units; hardware and software solutions for real-time systems.

The company also provides unique turnkey project management and ongoing customer support services for non-standard technological programs requiring close professional accompaniment.

Niron Systems & Projects is certified to ISO 9001:2008 and ISO 90003:2004.

Technical Specifications

Qualification…….................MIL-STD-810F

EMI/RFI………....................MIL-STD-461E

Powe Supply per...............MIL-STD-704A

Operational service life …Over 50,000 hours

Useful service life………..Over 25 years