

1553-USB-PIU

The 1553-USB-PIU is a Portable Interface Unit providing full MIL-STD-1553 test, simulation and bus analysis capability in a compact self-contained unit, to connect via a USB interface to suitable host systems. The unit provides support for all 1553A, 1553B, McAir and STANAG 3838 variants in a self contained battery operated unit, and is supplied with a matching power supply and battery charger unit for desk-top use. The 1553-USB-PIU supports concurrent Bus Controller (BC) and up to 31 Remote Terminals (RT) with Bus Monitor (BM). An additional stand-alone Chronological Bus Monitor (CBM) facility is also provided, with comprehensive multi-level triggering capability. Full error injection capability is provided in BC and RT modes, with full error detection in BC, RT, BM and CBM modes. The unit provides a variable amplitude dual redundant 1553 interface. 2 Mbytes of dual ported RAM are provided. The unit is supplied with "C" Driver library, together with a Windows GUI, providing a user friendly software tool for all 1553 set-ups, data management and storage.

SPECIFICATIONS

General Specifications

- MIL-STD-1553A/B, STANAG 3838 compatible
- McAir compatible
- 2 Mbytes Dual Port RAM (all modes)
- BIT and diagnostics
- All set-ups programmable in real time
- Programmable for Direct or TX coupling
- Programmable TX amplitude
- Full error injection (BC & RT)
- Full error detection (all modes)

Bus Controller

Programmable Tx amplitude
Programmable inter-message delay
Programmable RT response time
Programmable Frame frequency
Programmable message sequencing
Messages and data changeable in real time
Acyclic message insertion
BC-RT, RT-BC, RT-RT, mode code, broadcast
Multiple data buffering, all transmitted and received messages
Full error injection / detection

Remote Terminal

Multiple RT simulation (up to 31 RT's)
All sub-addresses selectable
Selectable Broadcast mode
Programmable Mode Code sub-address
Programmable Status word
Programmable RT response time
Message time tagging (32 bit @ 500 nSec)
All active RT tables changeable in real time
Data and Status words changeable in real time

Bus Monitor

All data buffers monitored
All data time tagged (32 bit @ 10 μ Sec resolution)
All data available for analysis

Chronological Bus Monitor

Programmable conditional triggers and masks
Message time tagging (32 bit @500 nSec resolution)
Store all, store only, store after modes
Full error detection capability

Host System Interface

USB interface, with cable link

Power

Internal battery pack, LiOn, 3.6V, 4.6Ah
Run time on internal batteries, 8 hrs. (min.)

Physical Characteristics

Dimensions 200mm x 100mm x 50mm
Weight 480 grams

Environmental

Operating Temp. 0 – 50°C
Storage Temp. -20 – 70°C
Humidity 5% – 95% Noncondensing
MTBF (MIL 217F) 187,932 hrs at 25°C (GB)

Software Support

"C" Source Code Drivers
Windows GUI

Order Codes

1U11061G01 1553-USB-3F

Supplied with Universal PSU and battery charger, as standard, with User Manual and Software.

Contact Information



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