



Embedded computer based Onboard 1553 Bus Interface System (OBIS) for Bus Monitor (BM) and Remote Terminal (RT) Simulation Simulator

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has developed embedded computer based OBIS which interfaces with Spacecraft MIL-1553B bus to provide simultaneous multi Remote Terminal simulation and Bus Monitor (BM) functions. This system is used across GEO and IRS spacecraft wherever 1553 subsystems are present.

It is useful during integrated satellite testing as it aids in remote terminal simulation providing testability and also in analyzing/debugging the spacecraft 1553 subsystems performance with Bus Monitor function.



Top View Embedded OBIS

Salient Features

- This system provides simultaneous 31 RT's simulation and Bus Monitor functions.
- It is a miniaturised, cost-effective and indigenous development.

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Parameter	Specifications
Input Power	230∨ AC, ± 10%, 50 Hz, 1Phase
1553B Bus Interface	9 Pin D-Type Connector (Single Channel-Bus-A & Bus-B)
Functions	Single Channel Multifunction System
	- Simultaneous Multiple Remote Terminal (Upto 31 RT)
	simulation
	- Bus Monitor
Remote Interface	Ethernet
Front Panel	LED Indication for System Health status

Technology Transfer

URSC-ISRO offers to transfer of Embedded computer based Onboard 1553 Bus Interface System (OBIS) for Bus Monitor (BM) and Remote Terminal (RT) Simulation developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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