

Remote Terminal Unit (RTU)

The Remote Terminal Unit (RTU) is a fully redundant high reliable unit for bridging between the On Board Computer (OBC) and platform electronic interfaces. The RTU is flexible and have capability to handle most of the needed platform interfaces such as standard I/O, AOCs and Propulsion. The RTU is connected to the OBC via 1553 standard bus interface.



RUAG Space Compact Unit with connections on both sides maximising the number of interfaces per volume/mass.



KEY FEATURES

- Operational by flexible instruction list handling
- Fully deterministic commanding & acquisitioning
- Flexible interfaces by SW or simple HW configuration
- Including 4 Fault Containment Groups (FCG) giving full flexibility of selection for e.g. tripled thermistor acquisitions
- Simple specific mission adaptations by modular approach

- >3500 failure free equipment years in orbit
- >300 Launcher On-Board Computers
- >120 Satellite Data Handling Systems
- EDRS-C, MTG, ExoMars Rover, Hispasat 36W-1, SARah, Electra, Euclid, JUICE, Metop SG

BUDGETS

- Form factor 392 x 242 x 277 mm
- Power consumption 15 W stand by and just acquisitions
- Mass 16.6 kg Unit with full set
- In-orbit life time 15 years
- SRAM 1 Mbytes
- EEPROM 512 kbtes

INTERFACES

Typical Configuration

- 2x 135 Analogue Acquisitions
- 2x 300 Thermistor Acquisitions
- 2x 12 Low Level Commands
- 2x 144 High Power Commands
- 2x 3 Bi-Directional Serial Links
- 2x 16 Synch Signal Distribution
- 2x 8 UART
- 2x 3 MTQ Control
- 2x 6 Pressure Transducer Supply
- 2x 1 Magnetometer Supply
- 2x 1 Latch Valves
- 2x 18 Flow Control Valves with or without separate DC/DC
- 2x 12 Cat Bed Heaters

Control and Supply Interfaces:

- x2x 2 MIL1553
- 2x 1 Primary Input Power (22V-37V)
- 2x 1 Primary Input Power for Propulsion (22v-37V) or (32V-52V)
- 2x 2 ON/OFF by HPC
- 2x 1 ON/OFF Status

