

**Line Replacement Unit: Data Control Unit (DCU)****Fault Isolation Detection**

The principal fault detection and isolation characteristics for this unit are as follows:

- The DCU uses BIT as the principal method for fault detection and isolation. This includes IBIT and PBIT. The testability report, doc. #. TR 123 453 R1, provides detailed to the BIT effectiveness
- The DCU has a design requirement to achieve 90% detection of all electronic failures.
- The Latch BIT Indicator (front panel) will display a visual indication of the BIT status.
- The DCU generates a BIT status word (DCU\_Status). This status word contains the status of the DCU WRA and Shop Replaceable Assemblies.
- The BIT status word (DCU\_Status), when requested, is sent over the 1553 interface.
- The maintainer can access the status of the DCU at Operator Station Console, using the dedicated maintenance menus.
- A test port is provided on the front panel to allow the maintainer to access the status of the LRU and the SRA.
- No special tools or support equipment are required for the purposes of fault isolation for this LRU

**Accessibility**

The accessibility characteristics for this unit include the following:

- The maintainer has direct access to this unit which is mounted in Rack 2.
- No covers are required to be removed or opened to gain access.
- For the purposes of removal, this unit slides in and out of Rack 2.
- Other units and assemblies do not need to be removed to gain access to this unit.
- The maintainer has direct visual access to the BIT Indicator. A visual indication of Green and Red are provided, signifying whether the unit is "GO" (serviceable) or "NO GO" (unserviceable).
- This unit has no adjustments or controls that require adjustment for operational and maintenance purposes.
- The fasteners used to secure this unit, in situ, are captive and are located on the front (face) flange.
- The maintainer will not require special tools for the removal and replacement tasks

**Handling Characteristics**

The handling characteristics for this unit are:

**Weight:** 120 lbs

**Dimensions (H,W, D) inches:** 19.00/12.00/15.75

- For the purposes of removal and handling, this unit requires a three person lift, as detailed in MIL-STD-1472
- Handles are provided for lifting.
- The Centre of Gravity is clearly labeled on the on this assembly