3. OM3

The EM OM3 harness is representative of the as designed configuration in respect of:

- Mechanical Dimensions
- Thermal/vacuum environmental requirements
- Design as per sections applicable to the OM3 in XMM-OM/MSSL/SP/0045.06 “External Harness Design Document”.

The following exceptions apply to the EM OM3 as built configuration against the as designed configuration.

1. The full set of crimp tests as specified by PSS-01-726 were not performed.
2. The cable types are:
   for SL26 used: Cabletec T26070A1/4
   for TSP22 used: Raychem 55A1121-22-6-9
   for TSP28 used: Raychem 55A1121-28-6-9
3. The connectors and accessories are identical part numbers but are without CofCs.
4. The connector cable clamps are omitted.

4. SYSTEM

RFWs:

1. DBI Interface circuit. The OM Project has maintained that 220pF filter capacitors be used in the DBI interface circuit. Spacecraft system default values of 40pF have been included in the EID-B. The OM System design requests to use 220pF as per OM design and test and used in the RGS instrument.

Request for Deviations:

1. Inrush Current. The system exceeds the inrush current limits as detailed in the EMC Test Report.
2. EMC Conducted Emissions: The system exceeds limits as detailed in the EMC Test Report

1. OM1

The EM OM1 unit is representative of the as designed configuration in respect of:

- Mechanical interface
- Electrical interface with request for Deviation (inrush current)
- Functionality as seen from the spacecraft interfaces
- EMC performance with request for Deviation (conducted emissions)

Note that no software is included in the OM1.

The following exceptions apply to the OM1 as built configuration against the as designed configuration.

1. Only the PRIME half is implemented
2. The FM parts list is given in the as designed configuration. For the EM commercial quality equivalent function parts are used.
3. Materials are not thermal/vacuum rated
4. No optics are present
5. The CCD is stimulated from an LED illuminating a contact mask pattern
6. The TMPSU exceeds its EMC, noise and inrush current specifications
7. The internal circuit to vary the high-voltage and monitor thermistors is missing
8. The High Voltage unit is removed

2. OM2

The EM OM2 unit is representative of the as designed configuration in respect of:

- Mechanical interface
- Electrical interface with request for Deviations (inrush current)
- Functionality as seen from the spacecraft interfaces
- EMC performance with request for Deviation (conducted emissions)

The ICU and DPU software configuration is defined in XMM-OM/MSSL/SP/0150.02

The following exceptions apply to the OM2 as built configuration against the as designed configuration.

- Only the PRIME unit is delivered
- The FM parts list is given in the as designed configuration. Some parts are flight parts, others are commercial quality equivalent function parts that are thermal/vacuum rated.

XMM Optical Monitor

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OM EM Certificate of Conformance

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