



## **Triton Models TNS28-SNP12-XXX-XX**

### **Incidental Radiation 2.1053**

Triton Network Systems (TNS) engineering confirms that the radio equipment models covered in this report are assembled with identical sub-assemblies, shown in shaded area of Figure A, with radio equipment that were previously tested by Intertek Testing Services (ITS) to meet FCC Part 101 and 2.1053 for the radio equipment covered in ITS test report J20021364B.

Sub-assemblies outside the shaded area shown in Figure A are microwave & millimeter-wave frequency modules tested to radio equipment compliance under the FCC Part 101 requirements as covered in this report. In addition, all aspects of the radio equipment housing, power supply, grounding schemes and any digital / CPU clock speeds are identical between radio equipment previously tested by ITS and the radio equipment models covered in this report.

The IFU models under review in this report are built with the same construction of the IFUs that have been previously tested for incidental radiation. These IFUs that are under current review use the exact same housing and securing hardware. The internal subassemblies of the unit are all the same.

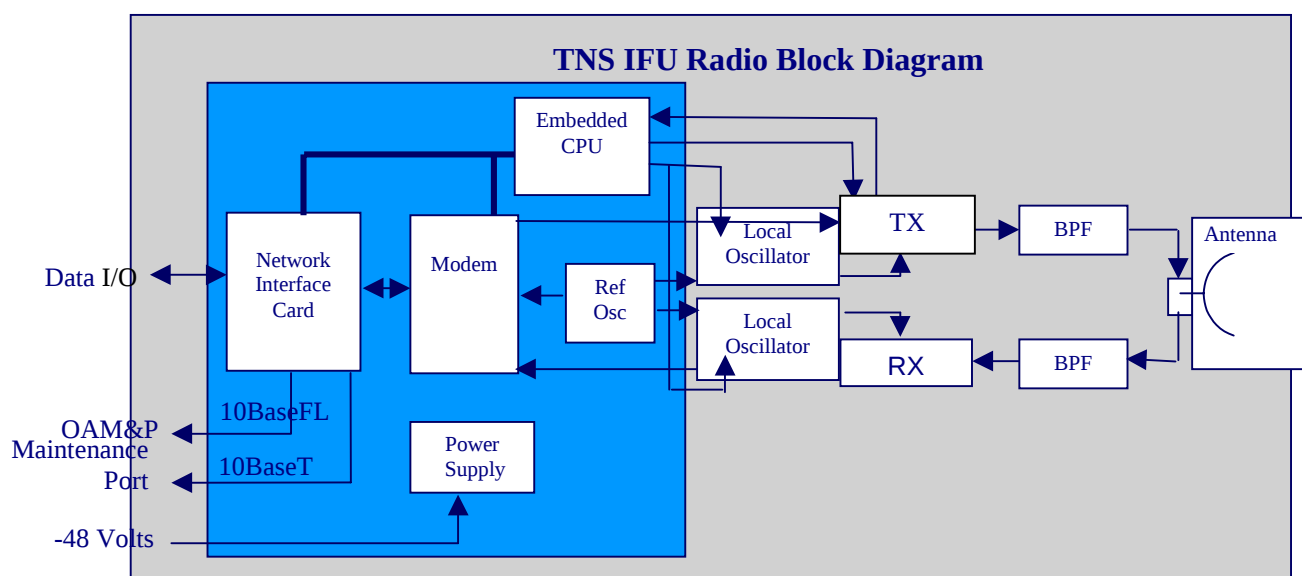
The results of the previous testing on the IFU models for radiated emissions can be found in Table 1. The only observed spurious emission occurred at a field strength level of 33.8 dB( $\mu$ V/m). The required spurious attenuation is equivalent to a power limit of -13 dBm conducted, which corresponds to a field strength level of 84.5 dB ( $\mu$ V/m) at 3 m. The observed spurious emission value is 50.7 dB below the regulatory limit, and thus no substitution measurements of spurious attenuation were performed.

Table 1. Incidental Radiation Test Results from Report J20021346B, 30 MHz - 200 GHz

| Ant<br>Pol<br>(V/H) | Frequency<br>MHz | Reading<br>dB ( $\mu$ V) | Antenna<br>Factor<br>dB(1/m) | Cable<br>Loss<br>dB | Pre-Amp<br>Factor<br>dB | Distance<br>Factor<br>dB | Net dB( $\mu$ V/m) |
|---------------------|------------------|--------------------------|------------------------------|---------------------|-------------------------|--------------------------|--------------------|
| H                   | 131.500          | 26.0                     | 6.9                          | 0.9                 | 0.0                     | 0.0                      | 33.8               |

No other emissions were detected within 20 dB of the applicable attenuation limits, or above the measuring equipment noise floor. An attached, separate analysis of noise floor, demonstrates that adequate margin exists to detect any spurious emissions present with at least 13 dB of margin below the attenuation limit at 200 GHz.

This data review and analysis of the IFU construction justifies that the IFUs under review meet the requirements of Part 2.1053.



**Figure A –IFU Sub-Assembly Block Diagram**