

VMD-TX-100-C SAR Testing**Relevant FCC Chapter:**

2.1093 Radio frequency radiation exposure evaluation: portable devices.
2.1093

(c) Portable devices that operate in the Cellular Radiotelephone Service, the Personal Communications Service (PCS), the Satellite Communications Services, the General Wireless Communications Service, the Wireless Communications Service, the Maritime Services, the Specialized Mobile Radio Service, the 4.9 GHz Band Service, the Wireless Medical Telemetry Service (WMTS) and the Medical Implant Communications Service (MICS), authorized under subpart H of part 22 of this chapter, parts 24, 25, 26, 27, 80, and 90 of this chapter, subparts H and I of part 95 of this chapter, and unlicensed personal communication service, unlicensed NII devices and millimeter wave devices authorized under subparts D and E, §§15.253, 15.255 and 15.257 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use. All other portable transmitting devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization or use, except as specified in §§1.1307(c) and 1.1307(d) of this chapter.

The VMD-TX-100-C operates in the services delineated by 2.1093 (c). However, the VMD-TX-100-C is not specifically designed for body-worn applications and, as such, the VMD-TX-100-C Operator's Manual states that "a separation distance of at least 20 cm must be maintained between the antenna and the body of the user or nearby persons."

The antenna supplied with the VMD-TX-100-C has a gain of 2.1dBi. The MPE (Maximum Permissible Exposure) calculation for the VMD-TX-100-C, operating with this antenna, and the minimum body-antenna separation stated above (20cm), yields a Power Density of 0.04mW/cm². The limit for Maximum Permissible Exposure (MPE) (General Population) in the frequency band 1.50 - 100 GHz is 1 mW/cm² (47 CFR 1.1310).

The intended usage of the VMD-TX-100-C and the resulting MPE level exempt the VMD-TX-100-C from SAR testing and none was performed.

Spurious Radiated Emissions - 2.1053, 90.210(d)

Measurements performed by RETLIF TESTING LABS

See Test Report Attachment R-5263N, Pages 1 thru 20

ATTACHMENT FILE: R-5263N DTC Communications Digital Transmitter Data Package (VMD-TX-100-C).pdf