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1 List of applicable FCC rules

MWMII is tested to below:

- 47 CFR § FCC 15.247:2019 - Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz
- 47 CFR § FCC 15.407:2019 - General technical requirements

2 Summarize the specific operational use conditions

Below antennas are to be used with MWMII –

- Ethertronics 9000129

Electrical Specification

Typical Characteristics
(In reference device housing made of PC/ABS plastic)

WLAN a/b/g/n + Japan Antenna (GHz)	2.390-2.490 b, g	4.900-5.100 Japan	5.150-5.350 a	5.35-5.90 a
Peak Gain in dBi	2.0	4.0	5.0	6.0
Efficiency	65%	72%	72%	65%
Return Loss in dB	< -10.0	< -10.0	< -10.0	< -10.0
Feed Point Impedance	50 Ω unbalanced (other if required)			

- Ethertronics 1000672

Electrical Specifications

Typical Characteristics
(In reference device housing made of PC/ABS plastic)

WLAN a/b/g/n + Japan Antenna (GHz)	2.390-2.490 b, g	4.900-5.100 Japan	5.150-5.350 a	5.70-5.900 a
Peak Gain	1.5-2.5 dBi	3.0-5.0 dBi	3.0-5.0 dBi	3.0-5.0 dBi
Efficiency	65%	65%	65%	50%
VSWR Match	<2.0:1	<2.5:1	<2.0:1	<2.5:1
Feed Point Impedance	50 Ω unbalanced (other if required)			

The radio module is intended for professional users.

3 Limited module procedures

Not applicable. MWMII module is certified as Single Modular Approval.

4 Trace antenna designs

Not applicable. MWMII uses external antennas please refer to section 6.

5 RF exposure considerations

MWMII module is intended for mobile application conditions.

6 Antennas

MWMII uses one of two (external) antennas: Ethertronics 9000129 and Ethertronics 1000672.

Ethertronics 9000129 uses an ultra-small u. Fl. connector with 100 mm long cable and Ethertronics 1000672 uses an ultra-small u. Fl. connector with 200 mm long cable.

7 Label and compliance information

Host product manufactures are required to provide physical or e-label stating “Contains FCC ID VKF-MWM2” or equivalent with their finished product. For regulatory information to be provided, refer to

the FCC rules that apply to the host product. The label requirements for the RF device depends on the type of the equipment authorization used. So provide regulatory information as appropriate.

8 Information on test modes and additional testing requirements

MWMII has been tested in standalone configuration for FCC compliance testing and thus the simultaneous transmission conditions, if applicable, must be evaluated by the integrator. Evaluate compliance for a host using certified modules and/or a stand-alone product requires: addressing EMC requirements for composite system testing and for simultaneous transmission.

Host manufactures are required to perform testing for spurious emissions if only one module is installed in the host.

Host manufactures are required to perform testing on the product with transmitter or transmitters operating to confirm that the host product meets the FCC requirements. This investigation of the final product can be done by spot checking emissions from the device while operating the host as a composite system (with all the transmitters operating simultaneously). This testing is performed with the host product configured in typical operational modes to check the fundamental-frequency and spurious emissions for compliance with all the applicable rules. Masimo Corporation provides test scripts which allow host to operate for FCC compliance testing.

In order to verify the continued FCC compliance, host manufacturers are required to consider test modes for different operational conditions as well as for multiple simultaneous transmitting modules or other transmitters, if any, in a host product. It is host product manufacture's responsibility to evaluate compliance.

In cases where host product is regulated under different or additional FCC rules, host product manufacturers are required to perform verification testing to confirm that the end product complies with all the accountable FCC compliance requirements.

9 Additional testing, Part 15 Subpart B disclaimer

Modular transmitter MWMII is FCC authorized for the rules specified on the grant and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

Host manufactures are required to obtain the equipment authorization of the applicable unintentional radiator functions under part 15 subpart B of the host product, and if required any additional testing and certification for any other included transmitters.