



February 16, 2015

Federal Communications Commission
Office of Engineering and Technology
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Re: Certification Application
FCC ID: SM6-MINODE-WATER4

Dear Sir or Madam:

Mueller Systems MINODE-WATER4, FCC ID: SM6-MINODE-WATER4, would like to have your authorization as a limited modular approval. The requirements of FCC part 15.212 have been met and shown on the following statements:

1. *"The radio elements of the modular transmitter must have its own shielding."* The radio portion of this module has been shielded.
2. *"The modular transmitter must have buffered modulation/data inputs."* The MINODE-WATER4 contains buffered data inputs; they are integrated in Atmel XMEGA256 device.
3. *"The modular transmitter must have its own power supply regulation."* The MINODE-WATER4 does not contain its own power supply regulation. The MINODE-WATER4 requires the host equipment to supply a regulated 3.6V supply. The MINODE-WATER4 will not be sold for inclusion in third party equipment and will only be sold as a part of a Mueller Systems product which will be designed to supply the properly regulated voltage to the module. This will satisfy the requirements for a Limited Module approval pursuant to Section 15.212(b).
4. *"The modular transmitter must comply with the antenna and transmission requirements of section 15.203, 15.204(b) and 15.204(b)."* The MINODE-WATER4 meets the FCC antenna requirements. The antenna for the MINODE-WATER4 limited module is either soldered directly to the printed circuit board or attached via an industry standard SMB connector. The module will only be sold and installed within Mueller Systems equipment with the antenna installed by factory trained personnel. The antenna will either be a Mueller Custom Monopole antenna, part number 145-0026-001, or a Mueller Custom Helical Antenna, part number 145-0021-001.
5. *"The modular transmitter must be tested in a stand-alone configuration."* The MINODE-WATER4 was tested in a stand-alone configuration via a serial interface.
6. *"The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying FCC identification number."* Please see attached exhibit, FCC Label for the FCC ID of this module.



7. *"The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements."* The MINODE-WATER4 is compliant with all applicable FCC rules. Detailed instructions for maintaining compliance are given in the attached exhibit, Installation Manual.
8. *"The modular transmitter must comply with any applicable RF exposure requirements."* The MINODE-WATER4 is compliant with all applicable RF exposure requirements. RF Exposure is addressed in the test report exhibit "MPE Data".

Sincerely,

A handwritten signature in blue ink that reads "Robert P. Keefe". The signature is written in a cursive style with a large initial "R".

Robert P. Keefe

Senior Vice President/Chief Technology Officer/Chief Information Officer