

March 24, 2015

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

Re: Application for Equipment Certification and Approval as a Limited

Modular Transmitter FCC ID: SM6-LMXR

## Dear Sir or Madam:

Pursuant to Section 15.212 of the Commission's Rules, Mueller Systems, LLC ("Mueller Systems"), respectfully requests equipment certification of FCC ID: SM6-LMXR as a limited modular device. Together with the information contained in the accompanying FCC Form 731, Application for Equipment Authorization, Mueller Systems hereby attests that the equipment complies with the limited modular approval requirements of Section 15.212 of the Federal Communications Commission's Rules as follows:

- 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 LMXR contains buffered data inputs; they are integrated in Atmel XMEGA384 device;
- 3. "The modular transmitter must have its own power supply regulation." The LMXR does not contain its own power supply regulation. The LMXR requires the host equipment to supply a regulated 3.6V supply. The LMXR 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 LMXR meets the FCC antenna requirements. The antenna for the LMXR limited module is attached via an industry standard MMCX connector. The module will only be sold and installed within Mueller Systems equipment with the antenna installed by field or factory trained personnel. The antenna will be one of the following or equivalent: LCOM HGV-906U or Mueller PCB part number 800-0102-001;



- 5. "The modular transmitter must be tested in a stand-alone configuration." The LMXR 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 LMXR is compliant with all applicable FCC Rules. Detailed instructions for maintaining compliance are given in the attached exhibit, Installation Manual; and
- 8. "The modular transmitter must comply with any applicable RF exposure requirements." The LMXR is compliant with all applicable RF exposure requirements. RF Exposure is addressed in the test report exhibit "Certification Report RF Exposure".

Sincerely,

Robert P. Keefe

Senior Vice President/Chief Information Officer/Chief Technology Officer