

Federal Communications Commission
 Authorization and Evaluation Division

REFERENCE
FCC ID: LLBY845802
RE: Request for Single-Modular transmitter
APPLICANT: Aclara Technologies, LLC.
June 26, 2025

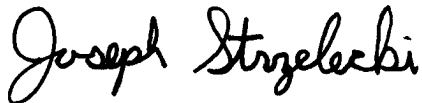
Modular approval Requirements

Item	Requirement	Meets	Justification
1	The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	Yes	The RF portions of the module are completely contained within a metal shielding can. The module does not depend on any other shielding.
2	The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 90 requirements under conditions of excessive data rates or over-modulation.	Yes	All of the data inputs to the radio are buffered from the host device (in this case the electric metering device) through the microcontroller on the radio module.
3	The modular transmitter must have its own power supply regulation.	Yes	The modular transmitter takes a nominal 4V from the host device and regulates it, using an LDO, to 3.6V to power the radio power amplifier. The 3.6V power rail is then further regulated, using a separate LDO, to 3.3V to power the radio IC and all other digital and analog circuitry, including the microcontroller.
4	The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of § 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.	Yes	The Antenna uses an IPX MHF RF connector. This is a unique connector that is not readily available to the general public. The product is professionally installed only. The installations are controlled by Aclara. Only approved antennas will be used. The product will not be sold to the general public.
5	The modular transmitter must be tested in a stand-alone configuration, i.e. the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in §15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see §15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 cm to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see §15.31(i)).	Yes	The device was tested with an external power supply and interface cable to a laptop computer. It had no additional shielding.
6	The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.	Yes	The FCC ID label format is included in the filing. The product has an FCC ID label permanently attached. When installed inside another enclosure, that enclosure will have an appropriate label for the module.

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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. A copy of these instructions must be included in the application for equipment authorization.	Yes	The power level and modulations are set by the factory. The end user cannot use unapproved frequencies or power levels.
8	The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.	Yes	Refer to RF exposure Exhibit. The transmitter meets MPE calculations of 47 CFR 1.1310.

Radiometrics has been authorized by Aclara Technologies, LLC to act as an agent in the preparation of their submittal request for Modular Approval.

Sincerely,



Joseph Strzelecki
Senior EMC Engineer
Radiometrics Midwest Corporation
Authorized Agent for Aclara Technologies, LLC..
E-Mail: joe@radiomet.com