



January 4, 2024

Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern:

Itron, Inc. hereby requests a Permissive Change Class II of the radio equipment certification for the IRM-STAR CAM3 radio module certification number, FCC ID: EO9OW3. This product differs from the originally approved product in the following manner:

- (a) Associated digital circuitry. – The following Bill of Materials and Approved Manufacturing List changes have been made to digital circuitry.
 - i. Main radio board: Depopulated an adjustable current load switch driving a USB port that was never used. Depopulated a 3-pin serial port header that is not used.
 - ii. RF board: Depopulated the Power Line Carrier circuitry as PLC is not supported for the IRM-STAR (CAM3) radio module. Replaced obsolete electrolytic capacitors that hold up the 12V DC rail for graceful shutdown of the radio after power outage.
- (b) Functional capabilities. – The following functional changes were made.
 - i. Power Line Carrier communications is not supported for the IRM-STAR (CAM3) radio module. (Made Bill of Materials and Approved Manufacturing List changes only to digital circuitry.)
- (c) Antenna Characteristics. – No change to antenna characteristics of the radio. Also see (e) Others.
- (d) Cosmetic differences – The original CAM3 radio boards were assembled into a module that was approved for use in the Cisco CGR1240 Connected Grid Router host chassis. The Cisco GGR1240 is no longer sold and has been replaced by the electrically compatible Cisco IR8140 Industrial Router. The CAM3 radio boards were reassembled into a new CAM3 radio module version, called the IRM-STAR radio module, for use in the Cisco IR8140 Industrial Router host chassis. The two modules use the same CAM3 radio hardware and firmware, but each module is physically limited to installation in a single host router model.
- (e) Other – The following external antennas have been removed or added to support the IRM-STAR (CAM3) radio module in the Cisco IR8140 host.
 - i. Removed support for 915 MHz, 5.15 dBi omnidirectional antenna.
 - ii. Removed support for 915 MHz, 2.8 dBi omnidirectional antenna.
 - iii. Added support for new 915 MHz, 2 dBi omnidirectional antenna.

I do attest that the Field strength and/or RF Output readings remained the same or are lower than the originally approved product and that they did not increase, therefore qualifying this product for this application type.

Sincerely,

Jack McPeck
Sr. Product Development Manager
Itron, Inc.