

RE: LW2-781S58 Antenna Types, FCC 15.203 compliance

To whom it may concern,

The Emerson Wireless 781SA Smart Antenna is currently approved with an integral monopole antenna, peak gain 2dBi. This antenna type and design will continue to be offered within the "local" housing option as an internal antenna.

In pursuant of this C2PC, the following antenna types and maximum gains will be added to be used with the 781SA using a "remote" housing as external antennas:

- L-Com HG2420P-120 20dBi sector antenna
- L-Com HG2418P 18dBi panel antenna
- L-Com HG2415U-PRO 15dBi dipole antenna
- L-Com HG2415Y 14.5dBi yagi antenna
- PCTEL BOA24008N 8dBi dipole antenna

The Emerson Wireless 781SA Smart Antenna feature board with remote antenna option utilizes a MMCX connector that is permanently enclosed in the housing. The MMCX connector is connected via cable to an external type N connector permanently located on the exterior of the product. The approved antennas must be connected to the type N connector with at least 25' of cable.

Approved antennas are marketed with the product and listed in the product documentation along with the 781SA to address unique WirelessHART communication system topology (range, industrial infrastructure density, etc) used in this device.

This device must be professionally installed as per FCC rule 15.203 and KDB 353028. The 781SA is sold to and intended for use in industrial/commercial markets only, and it is not available to retail customers. This is because WirelessHART is an industrial network communication protocol used in professionally installed industrial process control systems. The 781SA must be installed, powered, configured, and maintained by expert personnel for proper WirelessHART system functionality. The 781SA must be connected to an Emerson 1410S Gateway, which is password protected for configuration and limits access to only authorized personnel, including trained, professional instrument technicians and/or engineers.

Physical installation is limited to:

- The specific antenna types and gains listed above.
- In-field professional installers completing assembly of manufacturer-approved antennas to the external connector
 - All external remote antenna options utilize a female type N connector.
 - Procedure for antenna assembly to female type N connector is provided.
- In-field maintenance professionals replacing antennas
 - Replacement of approved antennas to female type N connectors.

Sincerely,



Daniel Wolf
Quality Engineer
Rosemount Inc.