FCC ID: MS8C9P (DataSend900-PSTN)

LIMITED TESTING APPROACH

The DataSend900-PSTN unit is designed such that it fully incorporates the PCB and Hardware Design of the DataRelay900 unit (FCC ID: MS8R9) without any changes. The PCB size was then extended to include additional peripheral circuitry required for the DataSend900-PSTN.

The complete 915MHz ISM-band radio section resides in the DataRelay900 section of the PCB only. No additional radio circuitry is included in the extended part of the PCB for the DataSend900-PSTN unit. Both these units use an identical Radio Hardware section and Radio Software configuration. These units use the same modulation scheme, modulation parameters, data-rate, bandwidths, power-levels, and frequency-channels with different transmit duty-cycles.

Following is the list of tests performed on the units

S.No	Test Description	DataRelay900	DataSend900-PSTN
1	Tx Radiated Emissions 30MHz-9.3GHz	TESTED	TESTED
2	Rx Radiated Emissions 30MHz-5GHz	TESTED	TESTED
3	EIRP	TESTED	TESTED
4	Dwell Time, Duty Cycle	TESTED	TESTED
5	Band-Edge Compliance (Static and Hopping)	TESTED	TESTED
6	AC Power Line Emissions (Tx and Rx)	TESTED	TESTED
7	20dB Bandwidth	TESTED	NOT TESTED
8	Channel Separation	TESTED	NOT TESTED
9	Number of channels	TESTED	NOT TESTED

The tests for the 20dB Bandwidth, Channel Separation and Number of channels done on the DataRelay900 unit were taken to be sufficient to demonstrate compliance of the DataSend900-PSTN unit as it uses identical Radio configuration. This configuration is fixed in the software and the system does not provide any interface for the end-user to change these settings during the field operation.