

April 08, 2024

REF: Ingersoll-Rand Industrial U.S., Inc. RTS RF Exposure Statement

For the products of model No.: RTS025PQ4, RTS060PS6, RTS060PH6, RTS060PS8,
RTS060PH8, RTS140PS8, RTS140PH8, RTS225PS8, RTS225PH8

The longest wi-fi message is 17 + 87 bytes = 104 bytes x 11.5 bits/byte = 1,196 bits

The transmit rate may be from 1 Mbps to 54 Mbps.

Take the worst case of 1 Mbps in a 100mS period. Actual performance limit for an operator would be 2 to 3 fastenings per second in short bursts so there cannot be more than 1 in any 100mS time period.

1uS x 1,196bits = 1.2mS

1.2mS over a 100mS period is 1.2%

The above estimate represents a worst case.

Say pulse is 100% on, so n=1 and t = 1.2mS

Correction factor in dB = $10\log [1.2/100] = 10\log(0.012) = -19.2\text{dB}$

Signature:



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