

The Intermec logo is written vertically in a bold, sans-serif font.

Date: December 8, 2003

Ref. FCC ID:  
HN2SB555  
HN22011B  
HN2ABTM3-2  
EHARFID915PCC-6

**Intermec  
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To Whom It May Concern:

Intermec Technologies Corporation hereby declares that our Model 700C Pen Computer for Data Collection with internal FCC Part 15 - 2.4 GHz DSSS transceiver, internal FCC Part 22.901(d) - 824 MHz transceiver, and Intermec IP3 add on RFID scanner FCC Part 15 - 902 MHz FHSS transceiver is described as the equipment under test (EUT). This EUT is categorically excluded from routine environmental evaluation for RF exposure by its classification as a Part 15/22.901(d) handheld mobile radio operating with approximately 915.4 mW ERP. Their summed ERP is less than 1.5 watts, therefore the EUT is categorically excluded from routine environmental evaluation per 47 CFR 2.1091(c).

Intermec Technologies Corporation hereby declares that our Model 700C Pen Computer for Data Collection with internal FCC Part 15 - 2.4 GHz DSSS transceiver, internal FCC Part 24E - 1800 MHz transceiver, and Intermec IP3 add on RFID scanner FCC Part 15 - 902 MHz FHSS transceiver is described as the equipment under test (EUT). This EUT is categorically excluded from routine environmental evaluation for RF exposure by its classification as a Part 15/24E handheld mobile radio operating with approximately 985.9 mW ERP. Their summed ERP is less than 3 watts, therefore the EUT is categorically excluded from routine environmental evaluation per 47 CFR 2.1091(c).

Note: The radio FCC ID: HN2ABTM3-2 cannot operate simultaneously with the IP3. The operation detail is contained within this application. Since the product would be configured for sale with the above listed radios, this clarification is required for co-located transmitter identification.

The attached tables showing MPE evaluation of the product with antenna options. Each radio band has specific a maximum permissible exposure (MPE) as stated in 47 CFR 1.1310. Refer to the limits shown in the calculation tables for details.

The general calculation for exposure at a distance of 20-cm (8-inch) distance is shown in the equation below.

$$S = (PG)/4 \pi R^2$$

Where: S = power density (mW/cm<sup>2</sup>)

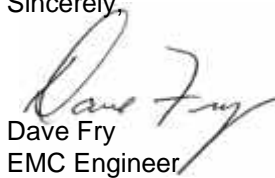
P = power input to the antenna (mW)

G = linear power gain relative to an isotropic radiator

R = distance to the center of the radiation of the antenna (20 cm = limit for MPE estimates)

Solving for S, the maximum power densities 20 cm from the transmitting antennas are contained within the following pages.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dave Fry".

Dave Fry  
EMC Engineer

[illegible]

700C with single band CDMA antenna used in with co-located 802.11b and IP3 transmitters  
Calculation for exposure at 20cm distance

Transmitter FCC ID: Antenna Description	Antenna Type	Antenna Part No.	Transmit Freq. (MHz)	Peak Conducted Power (mW)	Gain (dBi)	Pwr Density @ 20cm mW/cm <sup>2</sup>	Pwr Density Limit mW/cm <sup>2</sup>	Power Density Ratio
FCC ID: HN2SB555 Ext. single band 1850	dipole	805-606-004	1850	224.0	4	0.1119	1.0	0.1119
FCC ID: HN22011B Internal	folded monopole	805-608	2400	89.0	-2	0.0112	1.0	0.0112
FCC ID: EHARFID915PCC-6 Internal	panel	805-616-001	902	1000.0	0	0.1989	0.61	0.3261
							ratio limit	
Total							1.0	0.4492

**The worst case configuration for all combinations of co-located transmitters and antennas are shown.  
In all cases the ratio of exposure compared the limit when totaled does not exceed 1.0.**

### ERP Calculation of RF Exposure

ERP is sometimes preferred. The calculation as the Sum of the ERP of the co-located transmitters is  
in the table below. ERP TX1 + ERP TX2 + ERP TX3

Worst Case Exposure for 700C when using internal co-located transmitters with IP3 RFID scan handle option.  
Calculation for exposure at 20cm distance

Transmitter FCC ID: Antenna Description	Antenna Type	Antenna Part No.	Transmit Freq. (MHz)	ERP Power (mW)		Pwr Density @ 20cm mW/cm <sup>2</sup>	Pwr Density Limit mW/cm <sup>2</sup>	Power Density Ratio
FCC ID: HN2SB555 Ext. dual band 800/1850	dipole	805-606-002	824	272.2	0	0.0542	0.55	0.0985
FCC ID: HN22011B Internal	folded monopole	805-608	2400	34.2	0	0.0068	1.0	0.0068
FCC ID: EHARFID915PCC-6 Internal	panel	805-616-001	902	609.0	0	0.1212	0.61	0.1986
Total				915.4		0.1821		
							ratio limit	
Total							1.0	0.3039

700C with single band CDMA antenna used in with co-located 802.11b and IP3 transmitters  
Calculation for exposure at 20cm distance

Transmitter FCC ID: Antenna Description	Antenna Type	Antenna Part No.	Transmit Freq. (MHz)	ERP Power (mW)		Pwr Density @ 20cm mW/cm <sup>2</sup>	Pwr Density Limit mW/cm <sup>2</sup>	Power Density Ratio
FCC ID: HN2SB555 Ext. single band 1850	dipole	805-606-004	1850	342.7	0	0.0682	1.0	0.0682
FCC ID: HN22011B Internal	folded monopole	805-608	2400	34.2	0	0.0068	1.0	0.0068
FCC ID: EHARFID915PCC-6 Internal	panel	805-616-001	902	609.0	0	0.1212	0.61	0.1986
Total				985.9		0.1961		
							ratio limit	
Total							1.0	0.2736

**The worst case configuration for ERP combinations of co-located transmitters and antennas is shown.  
The ratio of exposure compared the limit when totaled does not exceed 1.0.**

Please note that EIRP = ERP x 1.64, so EIRP data presented is worst case.