

**Date: 4/21/2017**

**Re: Model 3300 LATITUDE™ Programming System: Antenna Info**

The Guidant Corporation (a wholly owned subsidiary of Boston Scientific Corporation doing business as Boston Scientific Cardiac Rhythm Management) Model 3300 LATITUDE™ Programming System is a programmer/recorder/monitor (PRM) for BSC cardiac rhythm implantable pulse generators such as pacemakers and defibrillators. The LATITUDE™ Programming System is used by trained medical professionals in hospitals and clinics during CRM device implantation and follow-up procedures.

The Model 3300 includes the following antennas:

- Wireless Telemetry (MICS: 402 – 405 MHz, ISM: 916.5 MHz, SRD:870 MHz): two (2) internal antennas
- Wireless Telemetry (MICS: 402 – 405 MHz): one (1) external Model 3203 Telemetry Wand
- Inductive Telemetry (< 100 kHz): one (1) external Model 6395 Telemetry Wand
- Wireless Connectivity (Bluetooth/Wi-Fi 2.4 GHz and 5 GHz): two (2) internal antennas

The characteristics of the Model 3300 antennas are described in Table 1 and Table 2.

**Table 1 High Frequency Antenna Characteristics**

Antenna	Manufacturer	Part Number	Type	Frequency (MHz)	Maximum Gain (dBi)
Telemetry A	Boston Scientific	PCA: 270704-031 PCB:270703-030	Monopole	402 – 405	-0.9
				868 – 870	-3.2
				902 - 928	-0.5
Telemetry B	Boston Scientific	PCA: 270704-011 PCB: 270703-010	Monopole	402 – 405	2.7
				868 – 870	-2.7
				902 - 928	-2.2
Model 3203	Boston Scientific	352220-001 Model 3203	Monopole	402 - 405	-5.0
Connectivity A	Boston Scientific	PCA: 270704-031 PCB:270703-030	Monopole	2400 – 2500	0.0
				5150 - 5850	2.4
Connectivity B	Boston Scientific	PCA: 270704-011 PCB: 270703-010	Monopole	2400 – 2500	0.5
				5150 - 5850	2.8

**Table 2 Low Frequency Antenna Characteristics**

Antenna	Manufacturer	Part Number	Type	Frequency	Dimensions (mm)	Turns
Inductive Telemetry Transmit	Boston Scientific	357514-100 Model 6395	Coil	< 100 kHz	45.7 x 68.4 x 2.5	21
Inductive Telemetry Receive	Boston Scientific	357514-100 Model 6395	Coil	< 100 kHz	45.7 x 68.4 x 2.5	50

The Model 3300 Telemetry A, Telemetry B, Connectivity A, and Connectivity B antennas are internal to the device with no access available by the user.

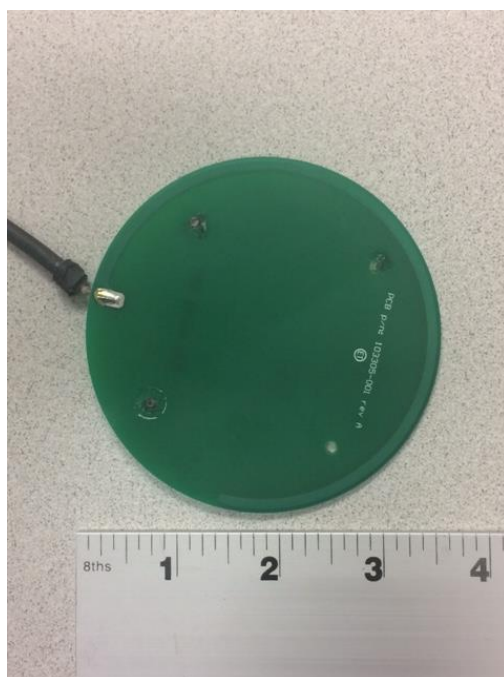
The Model 6395 Telemetry Wand interface to the Model 3300 programmer is a custom 10-pin interface with a loop back function to detect a valid wand.

The Model 3203 Telemetry Wand interface is a 1.0/2.3 50-ohm connector.

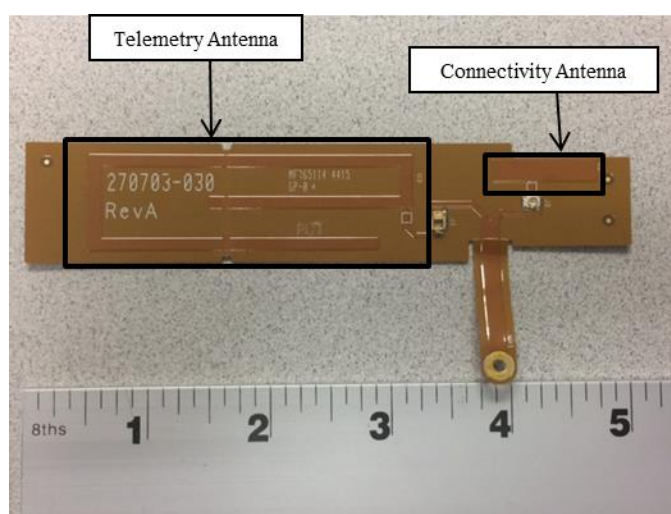
Photos of the antennas are included below. Additional photos can be found in the Internal Photos Exhibit that is part of this submission.



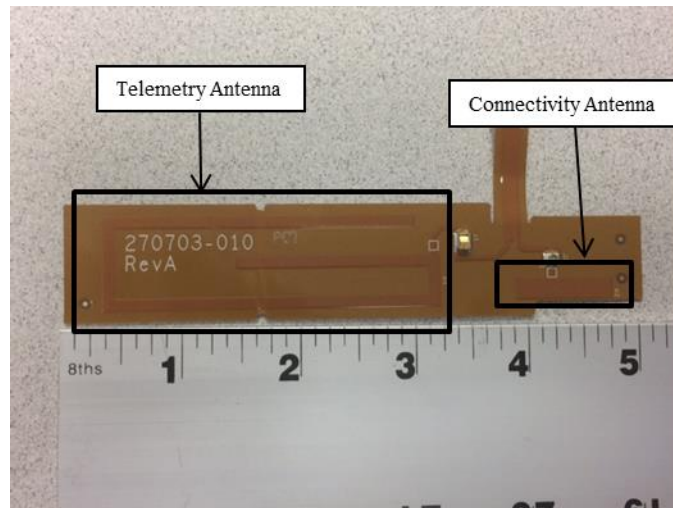
**Figure 1 Model 3203 Telemetry Wand (External)**



**Figure 2 Model 3203 Telemetry Wand (Internal)**



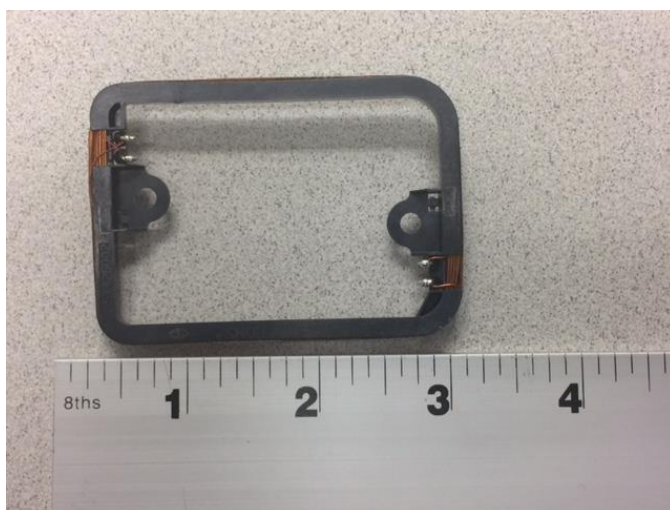
**Figure 3 Model 3300 Antenna A (Telemetry and Connectivity)**



**Figure 4 Model 3300 Antenna B (Telemetry and Connectivity)**



**Figure 5 Model 6395 Telemetry Wand (External)**



**Figure 6 Model 6395 Telemetry Wand Coil (Internal)**