

Exhibit I: Operational Description

FCC ID: CM676A91343-600

Operational Description

The 91341-05 is a battery-powered portable electrocardiogram (ECG)-only transmitter operating on a 25 kHz channel scheme in the 608 – 614 MHz band. The Telemetry Transmitter is a low-power device that is worn continuously by a patient. Patient physiological parameters are monitored and transmitted via radio frequency (RF) to a fixed antenna network. The antenna network feeds a receiver, which processes the data and forwards it to a central monitor for display.

The telemetry transmitter is intended to be used on the orders of a physician and limited to the confines of a healthcare facility. It is not for vehicle use outside the healthcare facility.

The 91343-05 is a battery-powered portable multi-parameter (ECG and SPO2) transmitter and the 91347-05 is a wideband electrocardiogram (ECG)-only transmitter. Both operate on a 50 kHz channel scheme in the 608 – 614 MHz band. The 91343-05 is also equipped with an Infrared (IR) interface that accepts data from compatible devices to forward other patient information to the central monitor. The Telemetry Transmitters are low-power devices that are worn continuously by a patient. Patient physiological parameters, such as heart rate and pulse oximetry, are monitored and transmitted via radio frequency (RF) to a fixed antenna network. The antenna network feeds a receiver, which processes the data and forwards it to a central monitor for display.

The telemetry transmitter is intended to be used on the orders of a physician and limited to the confines of a healthcare facility. It is not for vehicle use outside the healthcare facility.

Channelization Scheme

Wideband (50 kHz)

Channel #	Frequency (MHz)
2242	608.0375
2244	608.0875
2246	608.1375
2248	608.1875
2250	608.2375
2252	608.2875
2254	608.3375
2256	608.3875
2258	608.4375
2260	608.4875
2262	608.5375
2264	608.5875
2266	608.6375
2268	608.6875
2270	608.7375
2272	608.7875
2274	608.8375
2276	608.8875
2278	608.9375
2280	608.9875
2282	609.0375
2284	609.0875
2286	609.1375
2288	609.1875
2290	609.2375
2292	609.2875
2294	609.3375
2296	609.3875
2298	609.4375
2300	609.4875
2302	609.5375
2304	609.5875
2306	609.6375
2308	609.6875
2310	609.7375
2312	609.7875
2314	609.8375
2316	609.8875
2318	609.9375
2320	609.9875
2322	610.0375
2324	610.0875
2326	610.1375
2328	610.1875
2330	610.2375
2332	610.2875

Channel #	Frequency (MHz)
2334	610.3375
2336	610.3875
2338	610.4375
2340	610.4875
2342	610.5375
2344	610.5875
2346	610.6375
2348	610.6875
2350	610.7375
2352	610.7875
2354	610.8375
2356	610.8875
2358	610.9375
2360	610.9875
2362	611.0375
2364	611.0875
2366	611.1375
2368	611.1875
2370	611.2375
2372	611.2875
2374	611.3375
2376	611.3875
2378	611.4375
2380	611.4875
2382	611.5375
2384	611.5875
2386	611.6375
2388	611.6875
2390	611.7375
2392	611.7875
2394	611.8375
2396	611.8875
2398	611.9375
2400	611.9875
2402	612.0375
2404	612.0875
2406	612.1375
2408	612.1875
2410	612.2375
2412	612.2875
2414	612.3375
2416	612.3875
2418	612.4375
2420	612.4875
2422	612.5375
2424	612.5875
2426	612.6375
2428	612.6875
2430	612.7375
2432	612.7875

Channel #	Frequency (MHz)
2434	612.8375
2436	612.8875
2438	612.9375
2440	612.9875
2442	613.0375
2444	613.0875
2446	613.1375
2448	613.1875
2450	613.2375
2452	613.2875
2454	613.3375
2456	613.3875
2458	613.4375
2460	613.4875
2462	613.5375
2464	613.5875
2466	613.6375
2468	613.6875
2470	613.7375
2472	613.7875
2474	613.8375
2476	613.8875
2478	613.9375
2480	613.9875

Antenna Information

The Tecom Patch Antenna, Part Number 823951 is integral to the unit (laminated under the label on the face) and is not user-accessible.

It is specified for a max. peak gain of 0 dBi, an average gain of -4dBi; and input VSWR of less than 2.0:1.

The input impedance is a nominal 50 ohms.

The antenna uses a micro-coaxial cable permanently soldered to the foil. The other end of the cables has a connector that is attached to the 50 ohm output of the RF PCBA.

Modulation and Channelization

Modulation Type:	FM - Two Level FSK
Modulating Signal: Data Signal:	0 to 5volts
Maximum Frequency:	4.096KHz Wide Band
Maximum Data Rate:	8.192KHz Wide Band
Modulation Index:	0.488 Wide Band
Channel Spacing:	50 kHz Wide Band
Duty Cycle:	100%

Communication Protocol Custom to Spacelabs

The modulation and channelization are controlled by a micro-controller on the transmitter board. This micro-controller reads the channel switch settings and programs the synthesizer with the appropriate register settings to lock to the desired channel. The micro-controller also controls

three digital potentiometers that are responsible for setting the deviation

of the FM modulation and the fine tuning of the center frequency. These potentiometer settings are calibrated during manufacturing and stored in flash memory. Two of the potentiometers adjust the voltage levels presented

to the control pin of the synthesizer's crystal reference. The other potentiometer adjusts the voltage levels presented to the VCO's varactors.

The RF output is turned off when the channel switch settings are invalid, when the VCO is unlocked, or when the battery voltage drops below 5.3V.