SpeedPod
Wireless Certification

1. GENERAL

SpeedPod communicates via 2.4 GHz link to a nearby computer with any compatible software package such as MyPod, Audit or PLS to report and retain all measured values. A USB receiver module is optionally provided with the system; alternatively, the host computer's integrated wireless adapter can be used. An external USB receiver is recommended for extended range.

2. COMMUNICATION PROTOCOL

SpeedPod can be operated in three distinct modes:

Mode 1: Single Sample
A single measurement value is communicated to the computer at the end of each measurement cycle. A normal transmission bandwidth is less than 0.2 Kbytes per second.

Mode 2: All Samples
All measurements are communicated to the system computer. A normal transmission bandwidth would be less than 0.5 Kbytes per second.

Mode 3: Measurement Buffer
A manual curve download can be requested. In this scenario, all raw sensor data is communicated to the computer. The data size is 6 channels, 2500 samples, 12 bits or a total of about 180 Kbytes. This manual operation takes around 15 seconds with an average transmission of 12 Kbytes per second.

3. CONNECTION

The common applications that are available from the manufacturer are MyPod, Audit and PLS software. These data management software packages automatically detect any devices within range and establish communication for the data transfer. Standard pairing procedure with the host needs to be completed.

4. RANGE

In a line-of-sight situation, communication can be established up to 10m using the optional EZMetrology USB Class 1 receiver. EZMetrology is not responsible for the wireless range from the built-in receiver in the host computer.

5. WIRELESS SPECIFICATIONS

The integrated wireless module has the following characteristics:

Operating Frequency : 2.412 to 2.484 GHz

Data Rate : Up to 150 Mbps

USB Receiver : USB 2.0

Tx and Rx Ratings :

Rate	Type (dBm)
11b, 1Mbps	19.5
11b, 11Mbps	19.5
11g, 6Mbps	18
11g, 54Mbps	14
11n, HT20, MCS0	18
11n, HT20 MCS7	13
11n, HT40, MCS0	18
11n, HT40, MCS7	13

Table 1 : Tx Power Ratings

Rate	Type (dBm)
1 Mbps	-97
2 Mbps	-94
5.5 Mbps	-92
11 Mbps	-88
6 Mbps	-93
9 Mbps	-91
12 Mbps	-89
18 Mbps	-87
24 Mbps	-84
36 Mbps	-80
48 Mbps	-77
54 Mbps	-75
11n, HT20, MCS0	-92
11n, HT20, MCS1	-88
11n, HT20, MCS2	-86
11n, HT20, MCS3	-83
11n, HT20, MCS4	-80
11n, HT20, MCS5	-76
11n, HT20, MCS6	-74
11n, HT20, MCS7	-72
11n, HT40, MCS0	-89
11n, HT40, MCS1	-85
11n, HT40, MCS2	-83
11n, HT40, MCS3	-80
11n, HT40, MCS4	-76
11n, HT40, MCS5	-72
11n, HT40, MCS6	-71
11n, HT40, MCS7	-69

Table 2 : Rx Sensitivity Ratings

6. COUNTRY SPECIFICS

6.1 FCC AND IC COMPLIANCE

SpeedPod complies with FCC Part 15:

- This device may not cause harmful interference.
- This device must accept any interference including interference that may cause undesired operation.

6.2 CE EUROPE

SpeedPod meets the requirements of the standards below and hence fulfills the requirements of **EMC Directive 2014/53/EU**.

6.3 MIC JAPAN

SpeedPod has type approval in Japan with identification code **217-204070**.

6.4 NCC TAIWAN

SpeedPod is approved for use in Taiwan with certificate number **CCAK21Y10020T0**.

6.5 KCC KOREA

SpeedPod is approved for use in the Republic of Korea (South Korea) by the KCC with certificate number **R-C-es5-ESP32WROOM32E**.

6.6 IC CANADA

SpeedPod complies with ISED Canada RSS-247 Issue 2 with certificate number **B20070614**.

6.7 SRRC CHINA

SpeedPod complies with the Radio Regulations of the People's Republic of China with CMIIT ID number **2020DP2713**.

Responsible for EZMetrology

President and Co-Founder
Tom Van Esch