Remote wireless load cell (Node)
Operational description

Wireless Aircraft Weighing System
Remote Wireless Load-Cells, (Node).

Each system contains from 3 to 5 hermetically sealed wireless load cells. Each precision load cell is sampled simultaneously and transmitted through the RF protocol to the handheld terminal. The sampling is synchronized by the handheld terminal that transmits a beacon to all nodes. The weighing result is processed and displayed in the terminal.

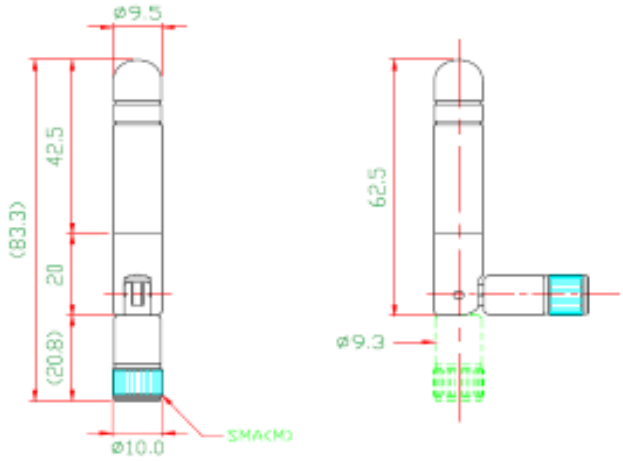
The wireless load cell operates in three modes:

- Off – no transmitting or receiving, low power mode.
- Standby mode– System wakes up to receive mode every 1.5sec, waiting for the master to initiate communication.
- Weighing mode – transceiver mode were the node receives a beacon from the master and then sample and transmit the weighing result.

Antenna description:
The system uses two identical antennas for diversity reasons. The antennas specification is as follow:

- Impedance: 50ohms
- Frequency: 2.4Ghz
- Radiation pattern: omni directional
- Gain: 2dbi (Typ)
- Interface: SMA male connector

Physical Dimensions



Vishay Advanced Technologies Ltd. – RFWAVES DIVISION
1c Yoni Netanyahu Street, Or Yehuda 60376, Israel, Phone 972-3-6344131, Fax 972-3-6344130

Block Diagram: