

Ref: LMA Compliance Letter
To: Federal Communications Commission

15 December 2011

Subject: LMA compliance letter

This letter introduces Visonic's request to approve its ZIGBEE module according to FCC Limited Modular Approval procedure, and to demonstrate the means to control the module as required by the LMA procedure.

Module description: The module is a small PCB (25 mm X 23 mm) ZIGBEE protocol transceiver @ 2.45 GHZ. This feature is provided by an embedded module IC ZigBee/802.15.5 type EM 357 manufactured by Ember, and a Skyworks 2.4 GHz Transmit/Receive front end with integrated LNA

The module is "piggy backed" on the mother board of each detector.

The module is not sold separately and is not installed in any unit other than Visonic's products. The module is currently used in the following hosts/Detectors: MCT 302 SMA, Clip SMA. MCT 550 SMA, Next Plus K9-85 SMA, MCT 427 SMA, MCT 442 SMA.

Regards



Arick Elshtein
International Standards Manager
Phone: +972 3 6456714
Fax: +972 3 6456788
Mobile: +972 54 6775714

As per § 15.212 Modular transmitters: Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.		
Requirement	Not Maintained	Maintained
(1) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	Not maintained	
(2) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 15 requirements under conditions of excessive data rates or over-modulation.		YES
(3) The modular transmitter must have its own power supply regulation.		Using battery
(4) The modular transmitter must comply with the antenna and transmission system requirements of §§15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a “unique” antenna coupler (at all connections between the module and the antenna, including the cable). The “professional installation” provision of §15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.		YES (Internal Antenna)
(5) The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in §15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see §15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimetres to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see §15.31(i)).	Not Maintained (The module was tested inside the battery powered Detector)	
(6) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.	Label is on the detector itself	