

BelAir Networks U.S. East 11921 Freedom Drive Suite 550 Reston, VA USA 20190

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August 23, 2006

Attn: Reviewing Engineer Federal Communications Commission 7435 Oakland Mills Road Columbia, MD 21046

**RE:** APPROVAL FOR MODULE FCC ID: RAR20006001 Radio module tested under part 27 MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

To Whom It May Concern,

The module FCC ID: RAR20006001 a radio module tested under part 27 WCS band, is submitted for Approval as a module by BelAir Networks Inc. The module can only be installed in BelAir Networks wireless products.

This letter affirms that BelAir Networks shall retain complete control over the final installation of the device and ensure compliance of the end-product to FCC regulations.

The module shall only be installed into a final product by technicians trained by BelAir Networks. The module shall not be distributed, marketed or sold to the general public. It will only be available installed in a complete BelAir Networks product.

The complete BelAir product shall only be sold by BelAir Networks directly or through a BelAir Networks-specified sales channel to authorized resellers, and will be installed by professional installers with training by BelAir Networks or authorized representatives.

The module is installed only in BelAir Networks products using antennas outlined in the filing, meeting fixed land station applications in compliance with part 27.50(a)(1). The antennas will always be fixed-mounted on permanent structures.

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As illustrated by the accompanying documentation, the module FCC ID: RAR20006001 is a module with its own RF shielding, contains the complete radio within the module, provides its own power supply regulation, was tested in a stand-alone configuration, will be labeled with FCC ID and meets RF exposure regulations.

The module has the following characteristics:

- The module has its own RF shielding. It has been tested for radiated emissions with the module on its own, with no external shielding beyond that incorporated into the module to ensure compliance to all radiated emissions requirements at the module level.
- The input to the module is an Ethernet interface. All
  modulation and 802.16 protocol elements reside within the
  module. There are no modulation or data inputs to the module
  which could alter the performance or behaviour of the
  modulator or radio which could cause it to exceed FCC limits.
- 3. The module has its own power supply filtering and regulation for all modulation and radio circuitry in order to avoid any issues with varying power supply inputs. The module is powered by several DC voltage rails. In order to test power line conducted requirements for the module, it was tested with the power supply and package as intended for the complete product which will be manufactured by BelAir Networks. BelAir Networks maintains complete control of the AC-to-DC power supply and packaging of the complete product and therefore ensures that compliance will be maintained.
- 4. The module was tested in a stand-alone configuration for all conducted and radiated emissions, except for conducted power line emissions. Since the module is not AC powered, it was tested with the power supply and package in the configuration with which it will be installed in the product. This configuration is also tested to ensure the complete product will meet all Class B radiated and conducted emissions requirements.
- 5. The module will be labeled with its own FCC ID number. Since this label will not be visible when the module is installed in the complete product, the manual indicates that the final product shall include a permanent label which uses the wording "Contains FCC ID: RAR20006001". See the labeling information provided with this submission.

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- 6. The module operates under Part 27 wireless communications services. Since all modulation and 802.16 protocol elements reside within the module, users will not have access to controls which may cause the module to operate outside its normal mode of operation. All timing and control for RF and modulator sections are inaccessible from outside the module.
- 7. The module has been evaluated (see MPE provided with this submission) and complies with RF exposure requirements. The manual states that a distance as per the table below shall be maintained between any person and the antenna. As BelAir Networks or its authorized agents will retain control of the final installation through the requirement for professional installation, BelAir Networks shall ensure that this distance is maintained in all installations.

	Minimum Safety Distance cm (inches)			
Node	25 dBi antenna	18 dBi and 15 dBi antenna	13 , 8, 6 dBi antenna	Radios
BelAir100 BelAir100S BelAir100C	80 (31.5 inches)	36 (14.5 inches)	24 (9.5 inches)	2 x RAR20006001 or 1 RAR20000003 and 1 RAR20006001
BelAir200	115 (45.5 inches)	51 (20.5 inches)	30 (11.8 inches)	4 x RAR20006001 or 1 RAR20000003 and 3x RAR20006001

Sincerely,

Marcel Chenier, VP Engineering,

BelAir Networks Inc.