



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

703-736-8306

BelAir Networks U.S. West
1902 Wright Place
Suite 200
Carlsbad, CA
USA
92008

760-918-5544

sales@belairnetworks.com

BelAir Networks Inc.
603 March Road
Kanata, Ontario
Canada
K2K 2M5

613-254-7070

info@belairnetworks.com

www.belairnetworks.com

June 19 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.

This standalone module was tested using the guidelines as outlined in FCC Public Notice DA 00-1407, Part 15 Unlicensed Modular Transmitter Approval.

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.

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 following is a point-by-point response to the applicable items listed in DA 00-1407:

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

703-736-8306

BelAir Networks U.S. West
1902 Wright Place
Suite 200
Carlsbad, CA
USA
92008

760-918-5544

sales@belairnetworks.com

BelAir Networks Inc.
603 March Road
Kanata, Ontario
Canada
K2K 2M5

613-254-7070

info@belairnetworks.com

www.belairnetworks.com

1. 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.
2. 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.
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

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

703-736-8306

BelAir Networks U.S. West
1902 Wright Place
Suite 200
Carlsbad, CA
USA
92008

760-918-5544

sales@belairnetworks.com

BelAir Networks Inc.
603 March Road
Kanata, Ontario
Canada
K2K 2M5

613-254-7070

info@belairnetworks.com

www.belairnetworks.com



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.

Node	Minimum Safety Distance cm (inches)			
	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,

A handwritten signature in dark ink, appearing to read "Marcel Chenier".

Marcel Chenier,
VP Engineering,
BelAir Networks Inc.