



SEIZE THE NIGHT

FIRELINX

Reliable Wireless

Corporate Office P.O. Box 8274 Incline Village, NV 89452
Ph 775-832-5552 Fax 775-684-7652 daver@firelinx.us

*President
David
Russell*

*Vice
President
Marketing
Larry
Mattingly*

*Vice
President
Engineering
Dave
Crosby*

www.firelinx.us

Application for Equipment Authorization (Limited Modular Approval)

Date: May 15, 2007

Manufacturer/Applicant Information:

Mfr: Firelinx Inc
Contact: David Crosby
Title: V.P. Engineering
Address: P.O. Box 8274
Incline Village, NV 89452
Phone: 775-832-5552
FAX: 775-684-7652
Email: dcrosby@firelinx.us

Firelinx Inc, a Nevada corporation, is requesting a limited modular approval on their model ASY-00006 RF Module. We have reviewed the requirements for limited modular approval, and believe this module addresses all of the requirements, as outlined below.

1. The modular transmitter must have its own RF shielding...:

The ASY-00006 RF Module has an integrated RF shield covering all active components on the board. The PCB top layer ground plane forms the 6th side to this RF shielding, providing complete containment of RF fields.

2. The modular transmitter must have buffered modulation/data inputs...:

The ASY-00006 RF Module has an integrated processor in addition to an IEEE 802.15.4 compliant radio interface and software stack. Both the transmit and receive data sent to/from the radio are buffered in FIFO's within the module.

3. The modular transmitter must have its own power supply regulation...:

The ASY-00006 uses a single chip radio/processor that has an internal 1.8V regulator used for its internal power amplifier. There is also an external power amplifier that boosts the total module transmit power to just under 20mW at the antenna



SEIZE THE NIGHT

FIRELINX

Reliable Wireless

Corporate Office P.O. Box 8274 Incline Village, NV 89452
Ph 775-832-5552 Fax 775-684-7652 daver@firelinx.us

President
David
Russell

Vice
President
Marketing
Larry
Mattingly

Vice
President
Engineering
Dave
Crosby

www.firelinx.us

connector. This power amplifier requires an externally regulated 3.0 to 3.3VDC supply as one of the conditions of its use under a limited modular approval. The module supply voltage requirements are contained in the OEM Installation Manual and emphasized as being constraints under which this module may be operated under its limited modular approval status.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c)....:

The ASY-00006 RF Module has an on-board reverse polarity SMA (RP-SMA) connector that will be used for antenna connection. Currently, there are two "host" products that will incorporate this module. One will have an antenna directly connected to the RP-SMA connector port, the other variation of this antenna has an integrated (short) cable from the antenna to the RP-SMA antenna port.

5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing....:

The ASY-00006 has been tested in a stand-alone configuration (not inside a host device), powered from both a battery source as well as from a wall transformer and has successfully passed both the radiated and conducted test requirements.

6. The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module....:

The module will have the FCC ID number located prominently on the top of the module shield. A sample of this label has been provided in the documentation package provided. A label design has also been included for mounting on the outside of the host device into which the ASY-00006 radio module is located.

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements....:

The **OEM Installation Manual** and the **User Manual** contain all details for the mechanical and electrical mounting of the module in a host device for proper operation. The hardware and firmware aspects of the implementation of the IEEE 802.15.4 over-the-air protocol is implemented in a certified compliant chip and radio stack software. The end user interface to the radio (via serial port) does not permit alteration of any operating parameters that would violate the IEEE 802.15.4 radio standard nor the operational limits under which the module was tested for approval.



SEIZE THE NIGHT
FIRELINX

Reliable Wireless

Corporate Office P.O. Box 8274 Incline Village, NV 89452
Ph 775-832-5552 Fax 775-684-7652 daver@firelinx.us

8. The modular transmitter must comply with any applicable RF exposure requirements....

The OEM Installation Manual will describe the proper mechanical and electrical mounting requirements for the RF module, and will prominently note the minimum safe operating distance by the operator from the antenna as 20 cm (8 inches).

*President
David
Russell*

*Vice
President
Marketing
Larry
Mattingly*

*Vice
President
Engineering
Dave
Crosby*

www.firelinx.us

The ASY-0006 module was designed by Firelinx for use in a family of products that will also be manufactured by Firelinx. The components and processes used in the manufacturing and testing of these modules will be controlled by Firelinx, as will the design of the boards onto which these modules are integrated, providing the tightest possible control over how these modules are both manufactured and integrated into our products.

Sincerely,

David Crosby
V.P. Engineering
Firelinx Inc