

Castel San Pietro Terme, 02 March 2015

Equipment Authorisation Division
 Federal Communications Commission

FCC ID: XM2-DFE7F
 Product Name: TDFE-7F

Class 2 Permissive Change

We submitted to certification (FCC-ID: XM2-DFE7F) our Digital Front End in authorized public safety bands (Public Safety 700 Narrowband Segment) for US market.

Now, we enable the Public Safety 700 Broadband Segment, so the Digital Front End is able to transmit on both 700 Broadband Segment and Narrowband Segment band.

The following table compares the old and the new frequency band:

Equipment already certified:

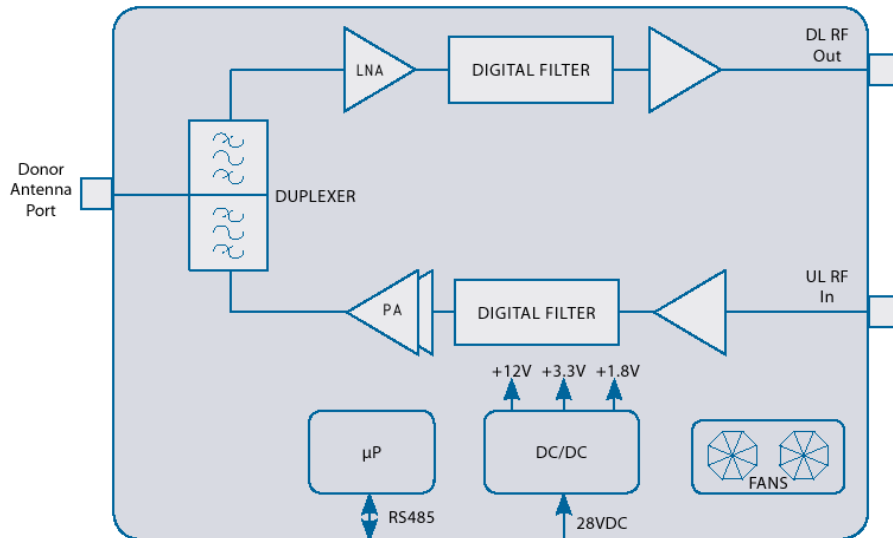
Commercial Name: TDFE-7F					
Band	Up-link operating frequency band	Down-link operating frequency band	Up-link Output Power	Down-link Gain (in master unit Tx)	Up-link Gain (out master unit Rx)
700 PS Narrowband	799-805 MHz	769-775 MHz	26dBm (1 carrier) 23dBm (2 carrier) 20dBm (4 carrier)	63dB	64dB

New Equipment:

Commercial Name: TDFE-7F					
Band	Up-link operating frequency band	Down-link operating frequency band	Up-link Output Power	Down-link Gain (in master unit Tx)	Up-link Gain (out master unit Rx)
700 PS Broadband Narrowband	793-805 MHz	763-775 MHz	26dBm (1 carrier) 23dBm (2 carrier) 20dBm (4 carrier)	63dB	64dB



Please, consider the following block diagram:



Digital Donor Front End Module block diagram

With reference to block diagram above:

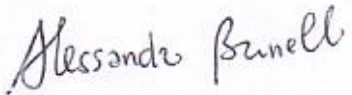
- **Duplexer** (passive filter) remains the same; the whole Public Safety 700 frequency band is supported by the passive filter embedded inside the equipment.
- **Power amplifier** are the same (part list of the main board doesn't change);
- No other change is expected in the hardware and in the software.

- The Digital filter (embedded on the main board, see Part list IC48) will be set by the factory with a different range of frequency to cover both 700 Broadband Segment and Narrowband Segment band. The digital filter frequency range is set by software and/or firmware by the factory only, there are no hardware changes.

So also the Public Safety broadband segment is enabled.



Dated 02 March 2015

By:  **ALESSANDRO BRUNELLI**
Signature **Printed**

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