



22/6/09

Extreme 3.65, base station system

Model: XTRM-BS-2SIS-3.6-EXT-SP

FCC ID:LKT-EXTR-36

To whom it may concern,

Contention based protocol

Extreme 3650 is a high capacity, IP services oriented Broadband Wireless Access system.

Extreme 3650 is digital modulated TDD system operating in the 3650 MHz up to 3675 MHz band.

The system contains a base station unit and a subscriber units.

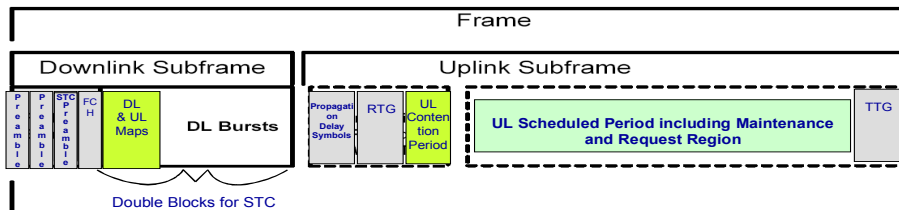
Subscriber units are available as Outdoor CPE and indoor CPE

According to FCC rules, the current Alvarion Extreme 3650 product line is eligible to operate in the 3650-3675 MHz band in the United States as “restricted contention-based” product.

Only the lower 25 MHz in the spectrum is assigned for restricted contention-based protocols, like IEEE 802.16d or 802.16e.

The recent FCC publication of “Memorandum Opinion and Order” on June 7, 2007 released 50 MHz spectrum for broadband wireless access applications. The most eminent difference in FCC ruling for this band is that it is “licensed”, while allowing both “unrestricted contention-based protocols” and “restricted contention-based protocols.” Specifically, the “restricted contention-based protocols” can only operate in the lower 25 MHz band.

STC mode TDD frame



Reservation Techniques for BW request

- Unicast polling
 - BS provides to SS an allocation sufficient for transmission of BW Request header [6 bytes]
- Multicast polling
 - BS provides to a group of SSS a REQ allocation
- Focused contention allocated once per 40 frames

Focused Contention

- SS may send a Focused Contention Transmission during a REQ Region-Focused.
- The REQ Region-Focused bandwidth requesting includes sending by the SS a **signal** [not message]
- BS allocates UL interval of REQ Region Focused by UL-MAP IE with UIUC=3. It should be of two OFDM symbols length
- The SS has to choose the following parameters and transmit the signal:
 - Contention Channel
 - Contention Code
- BS provides allocation for BW request header [message!] for anonymous SS that transmitted code X at channel Y in transmission opportunity Z

Focus Contention Codes

Contention Code Index	bit 0	bit 1	bit 2	bit 3
0	1	1	1	1
1	1	-1	1	-1
2	1	1	-1	-1
3	1	-1	-1	1
4	-1	-1	-1	-1
5	-1	1	-1	1
6	-1	-1	1	1
7	-1	1	1	-1

Focused Contention signal

