Wireless and LTE update

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Paris
Wireless Update
Nv2 for ARM boards

• Nv2 wireless protocol improvements for RouterBOARDs using ARM architecture – speed improvement and stability

• Changes added in RouterOS v6.44
LTE Update
Full range LTE products

wAP LTE kit

LtAP mini LTE kit
Full range LTE products

SXT LTE kit

LHG LTE kit
LTAP

- Multi-core CPU
- Gigabit Ethernet
- Built-in 2.4ghz Wireless
- Built-in GPS
- 2 slots for LTE modems (one slot support USB 3.0)
- USB port (shared with slot for modem)
R11e-4G modem

- LTE modem designed for 2.6Ghz and 3.5Ghz LTE networks
- Supported LTE bands:
  - TDD 41, 42, 43
  - FDD 3, 7, 20, 31
- NO support for 2G and 3G networks
New 4G modem kits

• wAP 4G kit:
  – wAP R + R11e-4G modem

• LtAP mini 4G kit:
  – LtAP mini + R11e-4G modem

• SXT 4G kit:
  – SXT R + R11e-4G modem

• LHG 4G kit:
  – LHG R + R11e-4G modem
Differences between R11e modems

- Each modem supports different LTE bands and designed for different market

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Difference between LTE, LTE-US, 4G kits

- Each kit has board with different LTE modem inside:
  - LTE – R11e-LTE modem
  - 4G – R11e-4G modem
Audience LTE

- Two 5Ghz wireless
  - 4x4 MIMO
  - 2x2 MIMO
- One 2.4Ghz wireless
  - 2x2 MIMO
- LTE CAT6 modem
CAT 6 LTE modem

• First MikroTik LTE Category 6 LTE modem:
  - Downlink up to 300Mbps
  - Uplink up to 50Mbps
  - Mini-PCIe form factor
  - Supported by all the RouterBOARDs with mini-PCIe slots that are designed for modems

• Carrier Aggregation (CA) with up to 2 bands

• Supported LTE bands and CA combinations – released in Summer
InterCell Series

• First MikroTik LTE SmallCell BaseStation Product line

• First InterCell products focuses on Outdoor solutions

• First InterCell Series product:
  – 10W outdoor Base Station for LTE Band 38 (2.6Ghz) and Band 39 (1.9Ghz)
InterCell Series Outdoor

- 10W TDD 2x2 MIMO LTE Base Station
- Single Carrier and Dual Carrier option
- 5/10/15/20 Mhz channel width support
- 4 Products with different LTE Bands:
  - B38+B39
  - B38+B38
  - B38
  - B39
InterCell Series Outdoor LTE Band Mapping

- Option to enable the mapping to a different LTE bands that supports the same frequency range

- B38 supported range (2570-2620Mhz)
  - Band-mapping to B41 within the same range (2570-2620Mhz)

- B39 supported range (1880-1920Mhz)
  - Band-mapping to B33 within the same range (1900-1920Mhz)
InterCell Series Outdoor

- **LTE speed per Cell**
  - DL 140Mbps (256QAM, SF2)
  - UL 30Mbs (64QAM, SF1)
- **Supported Clients per Cell**
  - Up to 96 Connected Active
  - Up to 192 Connected
- **Built-in EPC on board with up to 256 client support**
- **VoLTE and LIPA support**
- **+/-48VDC Power supply**
- **2xSFP and 2xETH (gigabit ports)**
- **Metal Enclosure with IP 67 rating**
InterCell Future plans

• Create new outdoor InterCell products for different LTE bands/frequencies
  – CBRS (B42,B43,B48)
  – Full B41 support

• Make Indoor SmallCell products
Thank you

For more info visit the MUM Registration table