InfiMAN 2x2



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Testing methodology

Throughput testing was carried out on a laboratory bench, which consists of base station sector (hardware platform H08) and several subscriber devices (hardware platform H11), and the communication channels established between them. Subscriber devices are connected to the switch, a device for traffic generation, operating according to RFC2544 standard, is connected to the eth0 interfaces of switch and BS sector.

The traffic generator creates data streams consisting of UDP datagrams with a specified length:

- in case of Downlink traffic test several data streams from Master to Slave (see Figure);
- in case of Uplink traffic test several data streams from Slave to Master (see Figure);
- in case of Bidirectional traffic several data streams from Master to Slave and from Slave to Master (see Figure).

Following key parameter values were used for testing:

- modulations: from MCS8 to MCS15;
- packet size: from 64 to 1518 bytes;
- number of subscriber terminals: from 2 to 24;
- frame period: from 2 to 10 ms;
- channel width: from 5 to 40 MHz;
- software version: MINT and TDMA.

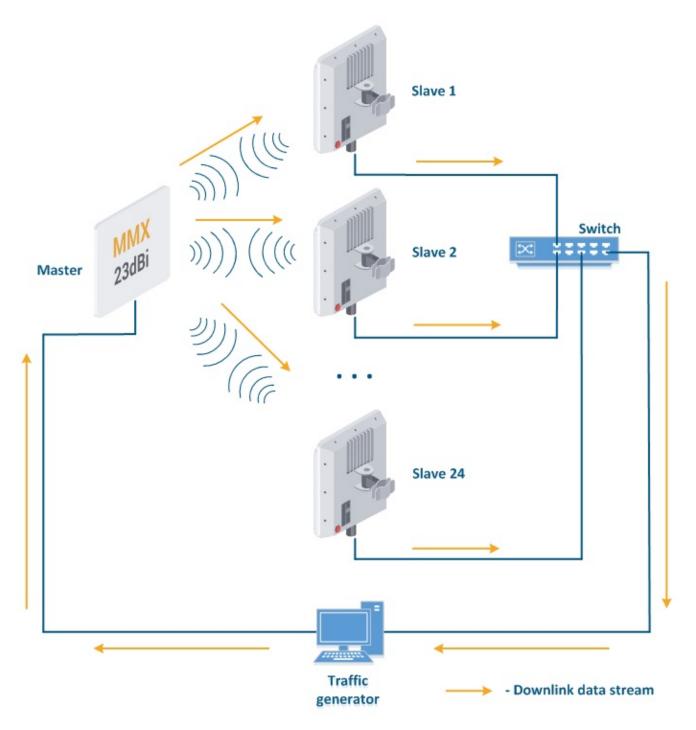


Figure - Downlink throughput test

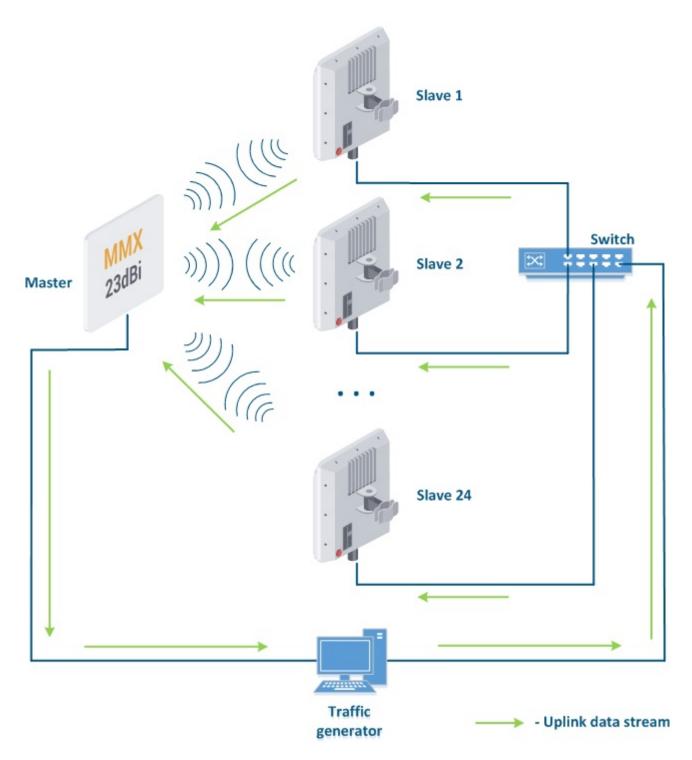


Figure - Uplink throughput test

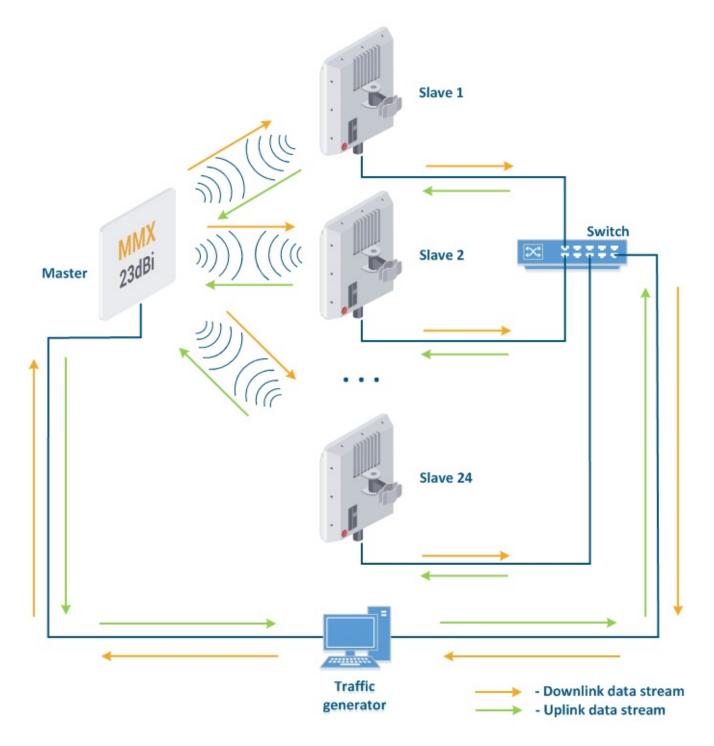


Figure - Bidirectional throughput test

Software version

The software version installed on the device affects performance, stability, and the range of features available for configuration. In this section, testing was performed on the following software versions:

- Software with Polling technology support: ver. 1.90.25 build date 04.08.16
- Software with TDMA technology support: ver. 2.0.60 build date 14.02.17