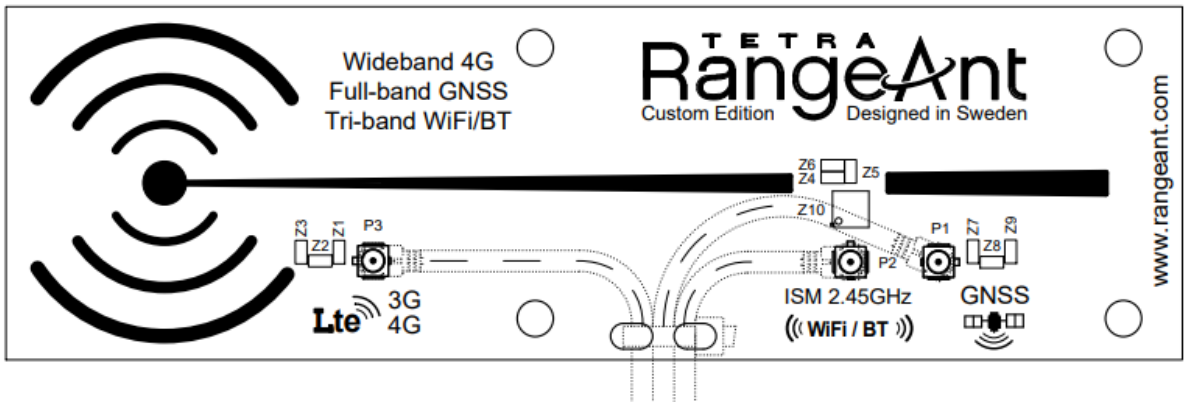


RangeAnt custom antenna **RA-TETRA_VemaVenturi**, for Peri Insite construction

Antenna model and revisions covered by this datasheet:

RA-TETRA_VemaVenturi_220909-900

The RA-TETRA_VemaVenturi is a combi antenna consisting of three individual antennas on one PCB. Below a short description of each antenna and the frequency bands they cover:

LTE antenna

Intended for the mobile telephony bands, 2G, 3G, 4G for voice and data transmission via connected connection. For this purpose, three different frequency ranges are covered, 700-960 MHz, 1680-2200 MHz, 2600-2700 MHz.

WiFi & BT antenna

*This part of the antenna is intended for Bluetooth and WiFi, both available within 2400-2480 MHz. However, this customized version of the antenna has an integrated SAW filter to protect the BT radio module of the customers **Carrion product** from the other radio communication signals generated in the product (i.e. primarily the LTE communication). The SAW filter that is now used in this antenna was specifically selected/decided by the customer. Note that this specific SAW filter has relatively high "insertion loss" and that's the reason why this version of the WiFi/BT antenna has lower antenna efficiency than its predecessor. But thanks to the SAW filter, the antenna also has good blocking capability of strong neighboring radio communication signals.*

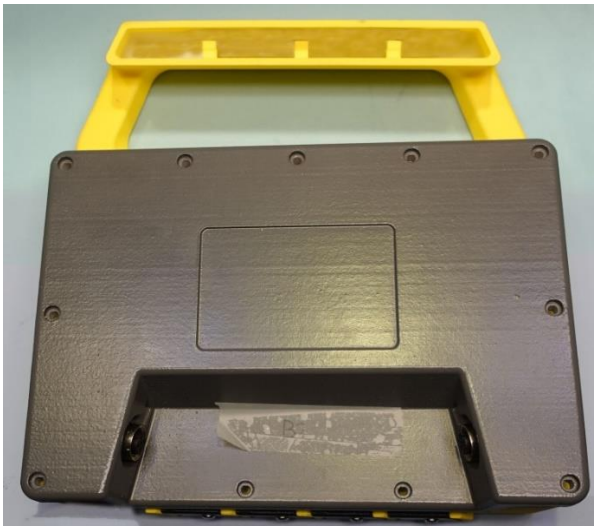
GNSS antenna

Intended for determining your own position and time via various networks of satellites. GPS, Galileo, GLONASS & BeiDou are 4 different such networks, which often come together under the name GNSS. Civilian useful data information from these systems is transmitted within the frequency range 1550-1600 MHz, which is the most capable frequency range of the TETRA GNSS antenna.

Conditions

General information

The **RA-TETRA_VemaVenturi_220909-900** antenna is intended for use in the below Vema Venturi Carrion product:



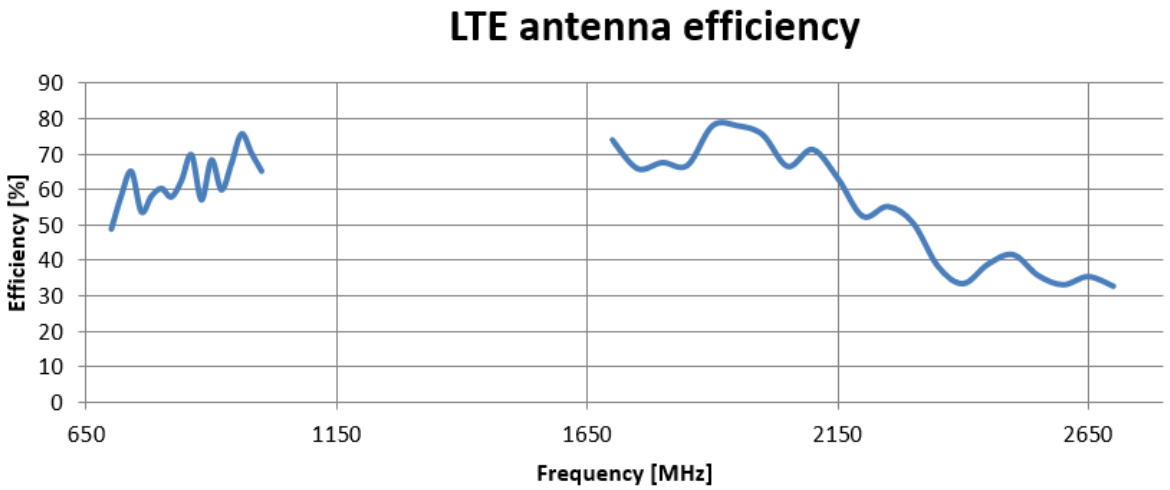
Antenna Characteristics

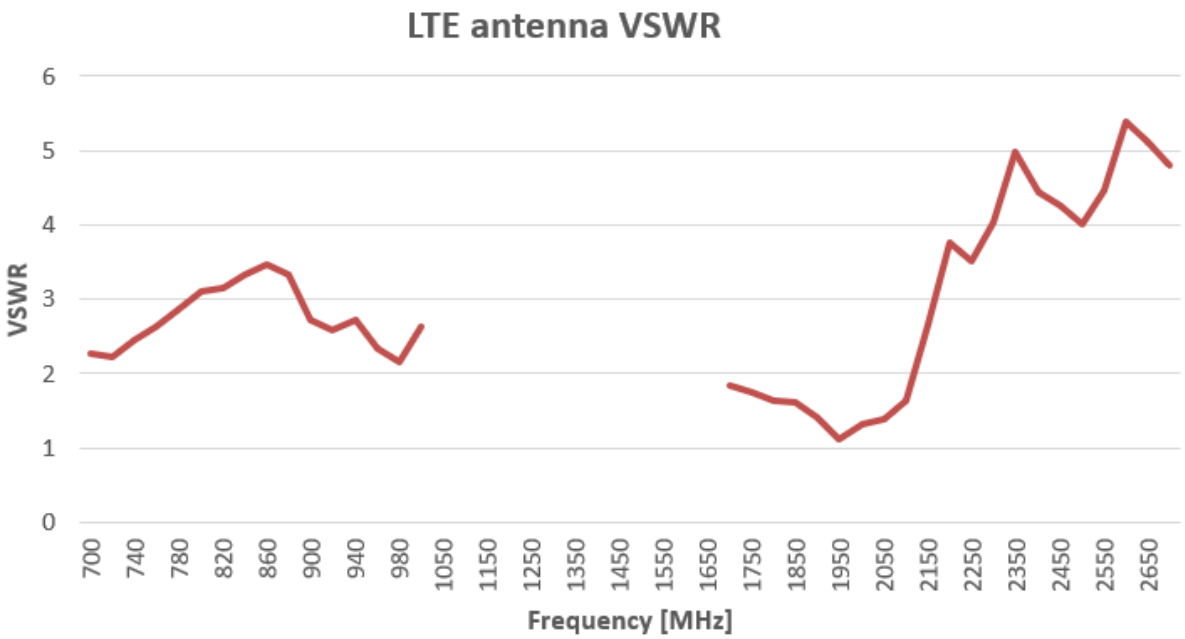
The antenna characteristics below are measured with matching components (same as in production) mounted on the antenna.

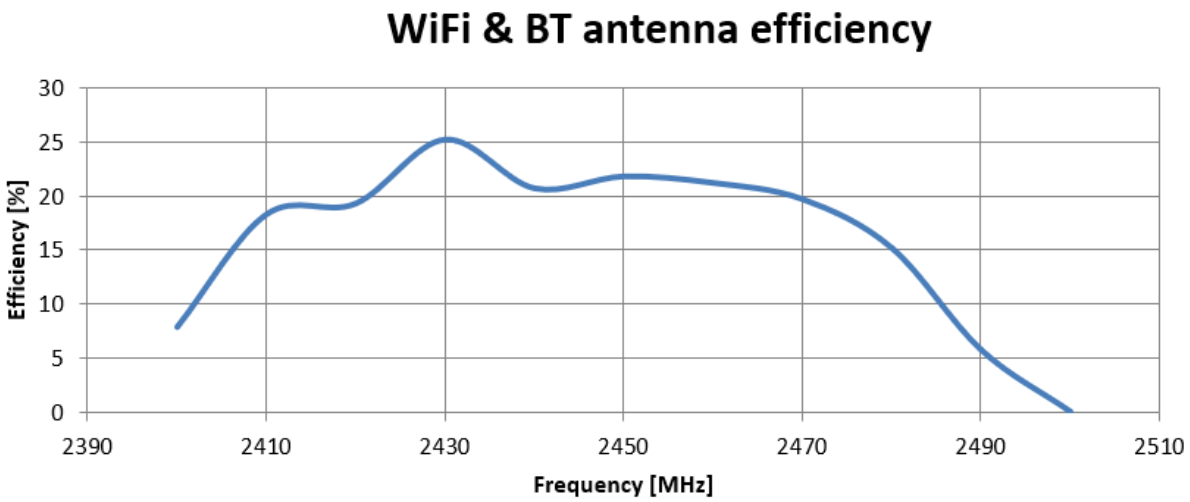
All values are typical values unless otherwise specified.

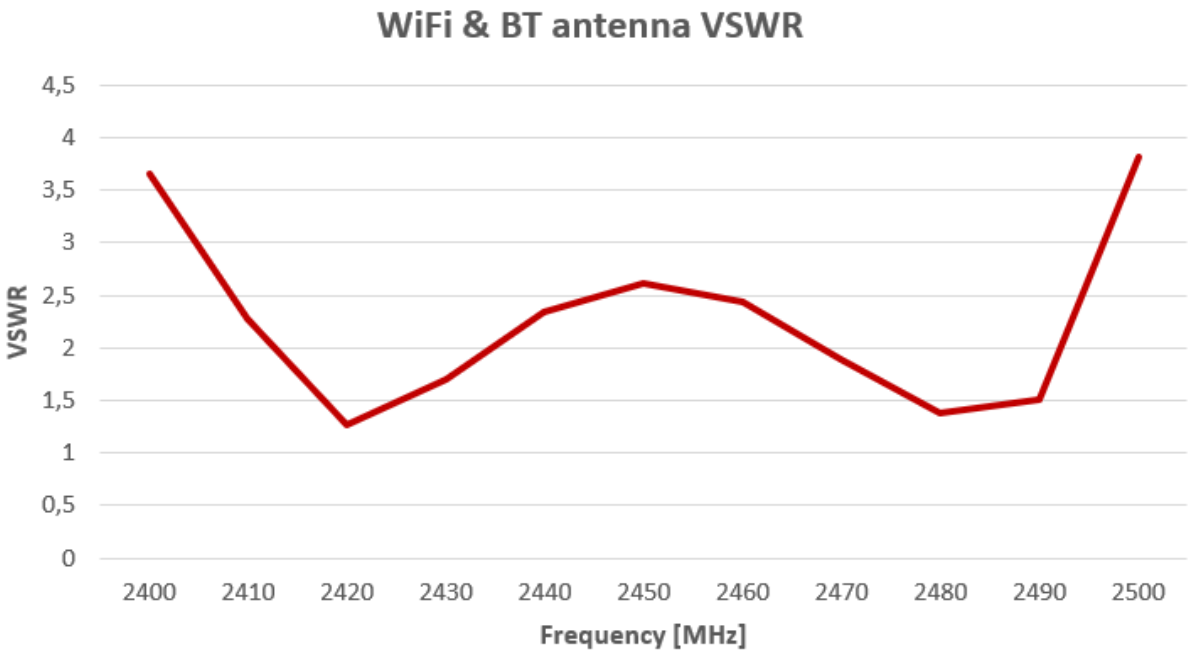
Antenna gain (dBi):

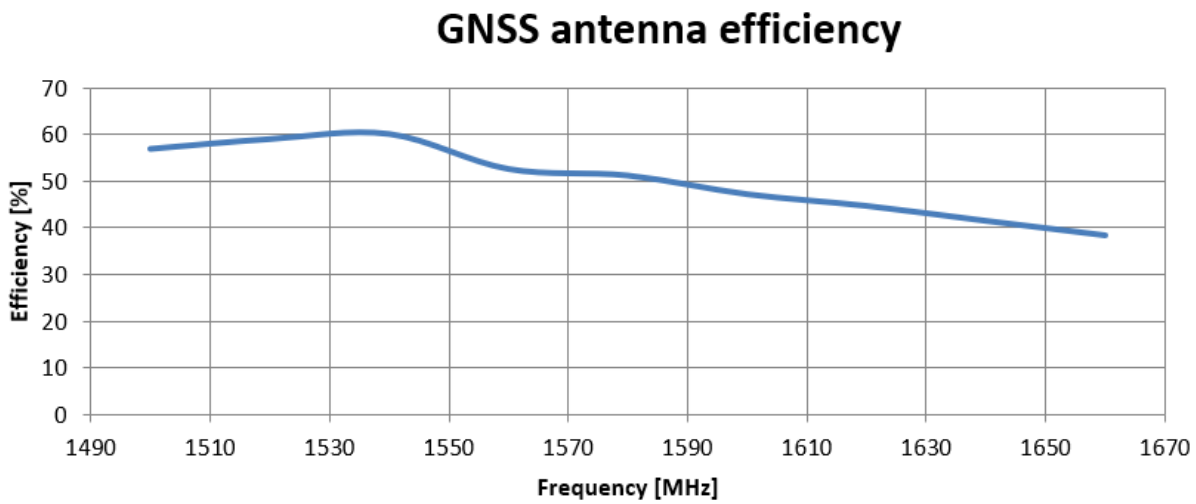
Antenna	***Frequency range***	***Antenna gain***
LTE	*700-960 MHz,* *1680-2200 MHz,* *2600-2800 MHz*	*Max 2 dBi*
WiFi & BT	*2400-2480 MHz*	*Max -4 dBi*
GNSS	*1550-1600 MHz*	*Max 2 dBi*

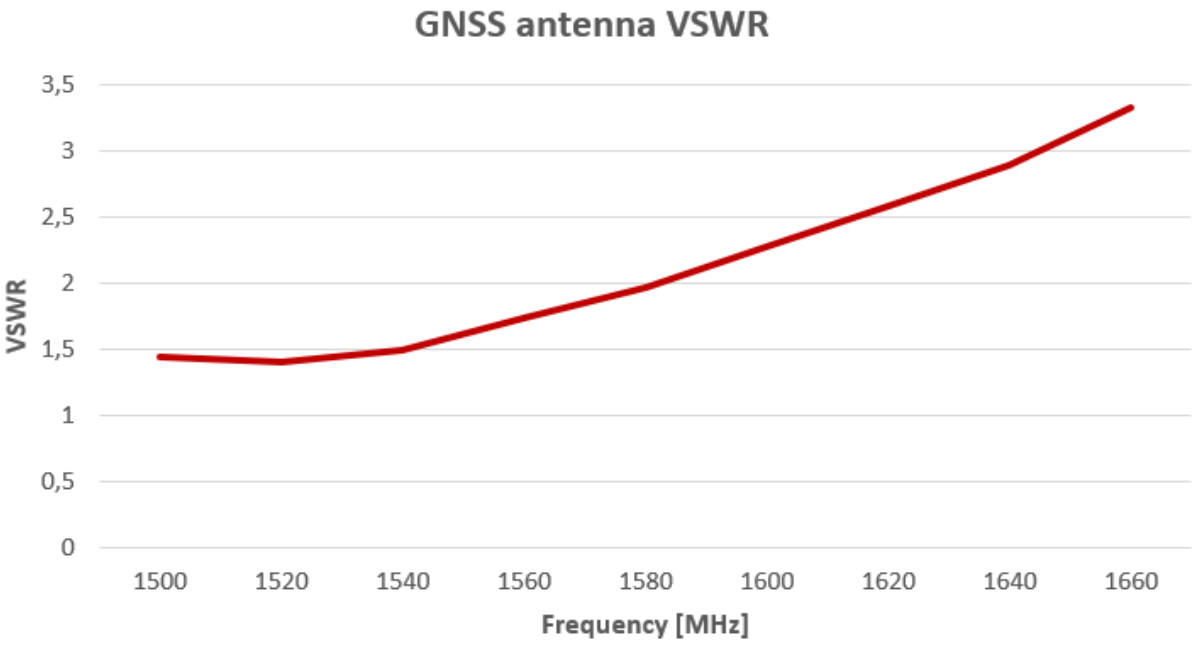






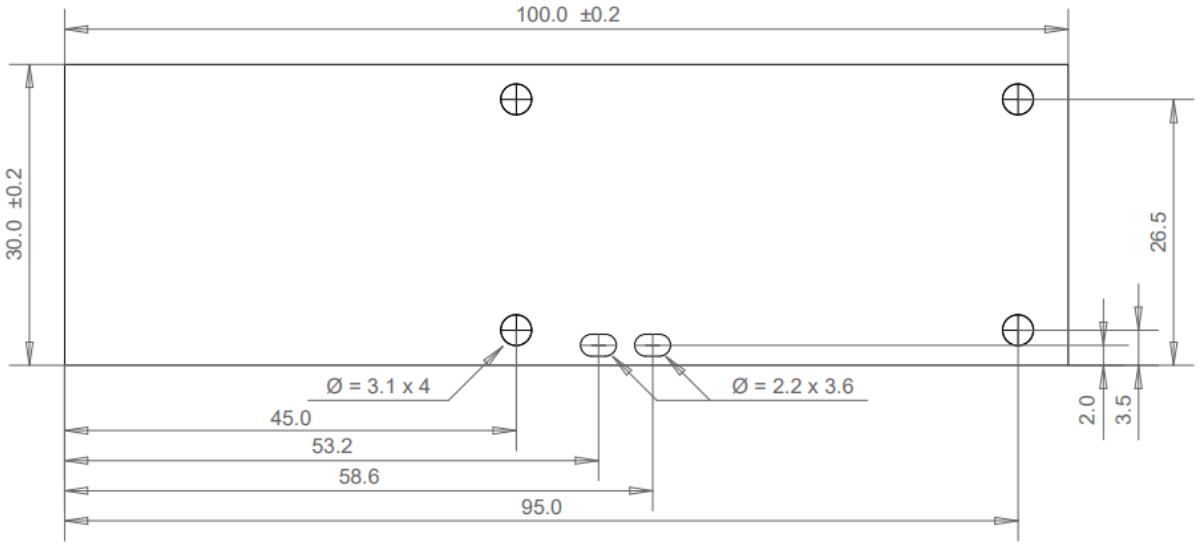


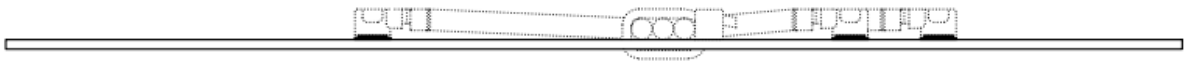


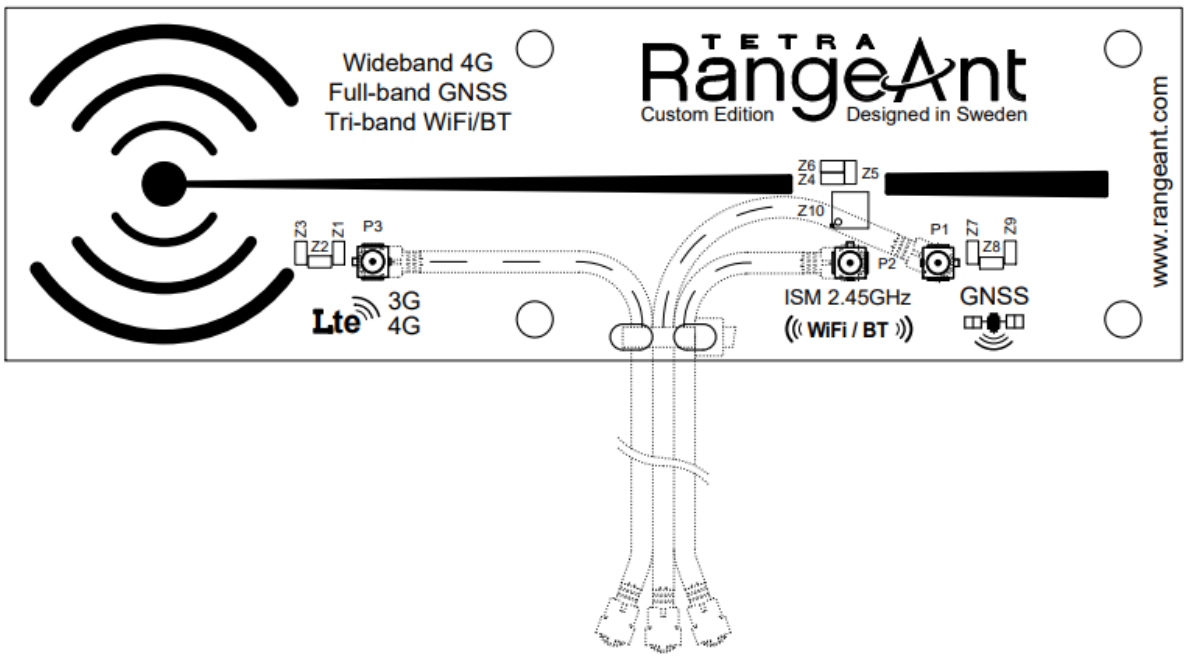


Mechanical Data and Dimensions

RA-TETRA_VemaVenturi







Model and Ordering Code

RA-TETRA_VemaVenturi_220909-900

Contact

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