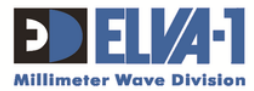


# V2X/V2N MobiBridge-10G Datasheet



## 10 GBPS V-BAND WIRELESS LINK FOR FOR DATA OFFLOADING FROM PUBLIC TRANSPORTATION

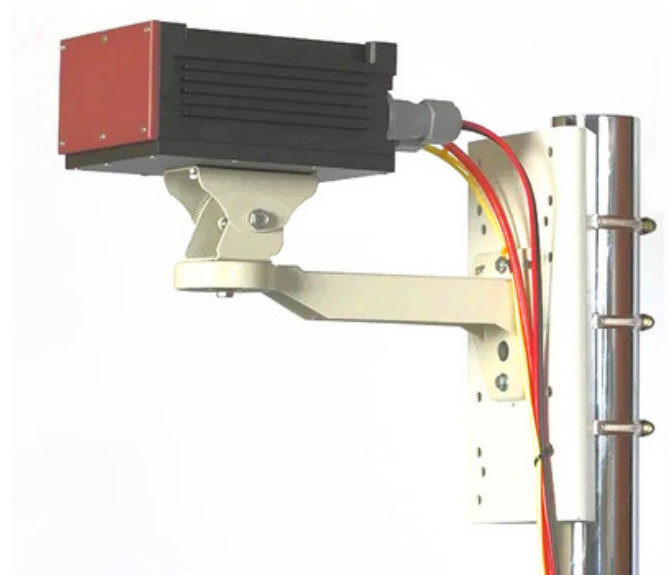
MobiBridge-10G is an exceptional mmWave wireless connectivity solution providing a full-duplex true 10 Gbps link between the light rail or buses and a network (V2N, vehicle to network).

Other applications include a wireless connection of train carriages within inter-train network, public transport communications at stops and under move, wideband Internet access for cruise ships and ferries moored to the piers, wideband Internet access to aircrafts at airports and for other short-range ultra-wideband applications.

The radios support up to 7 sub-bands of unlicensed V-band (57 to 71 GHz) and are equipped with a built-in electronically scanned antenna with auto-connect functionality.

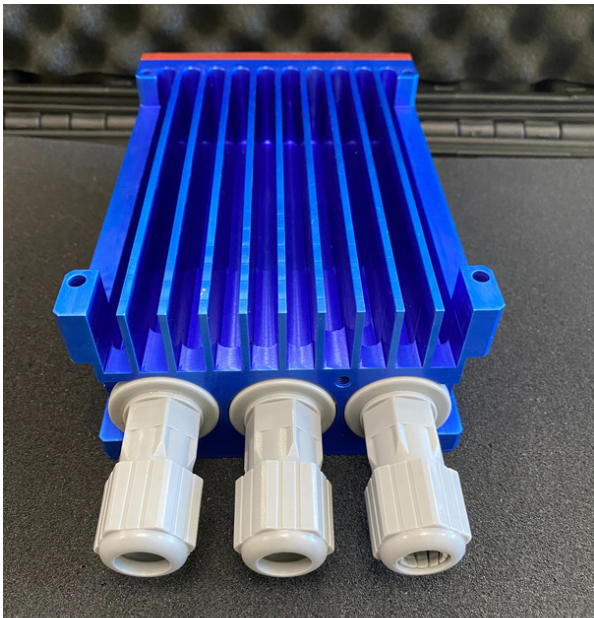
This V-band mmWave solution assures operational efficiency, ease of use and IP65/IP68 all-weather protection.

- Max 10 Gbps data transfer rate
- Full duplex mode
- 600 GB of data offloading in 10 minutes
- Unlicensed frequency band 57 to 71 GHz
- Subbands @2000 MHz
- Adaptive modulation up to QAM128
- Automatic configuration
- IP65 / IP68 case and open-frame versions





## APPEARANCE, CONNECTORS AND MOUNTING POINTS



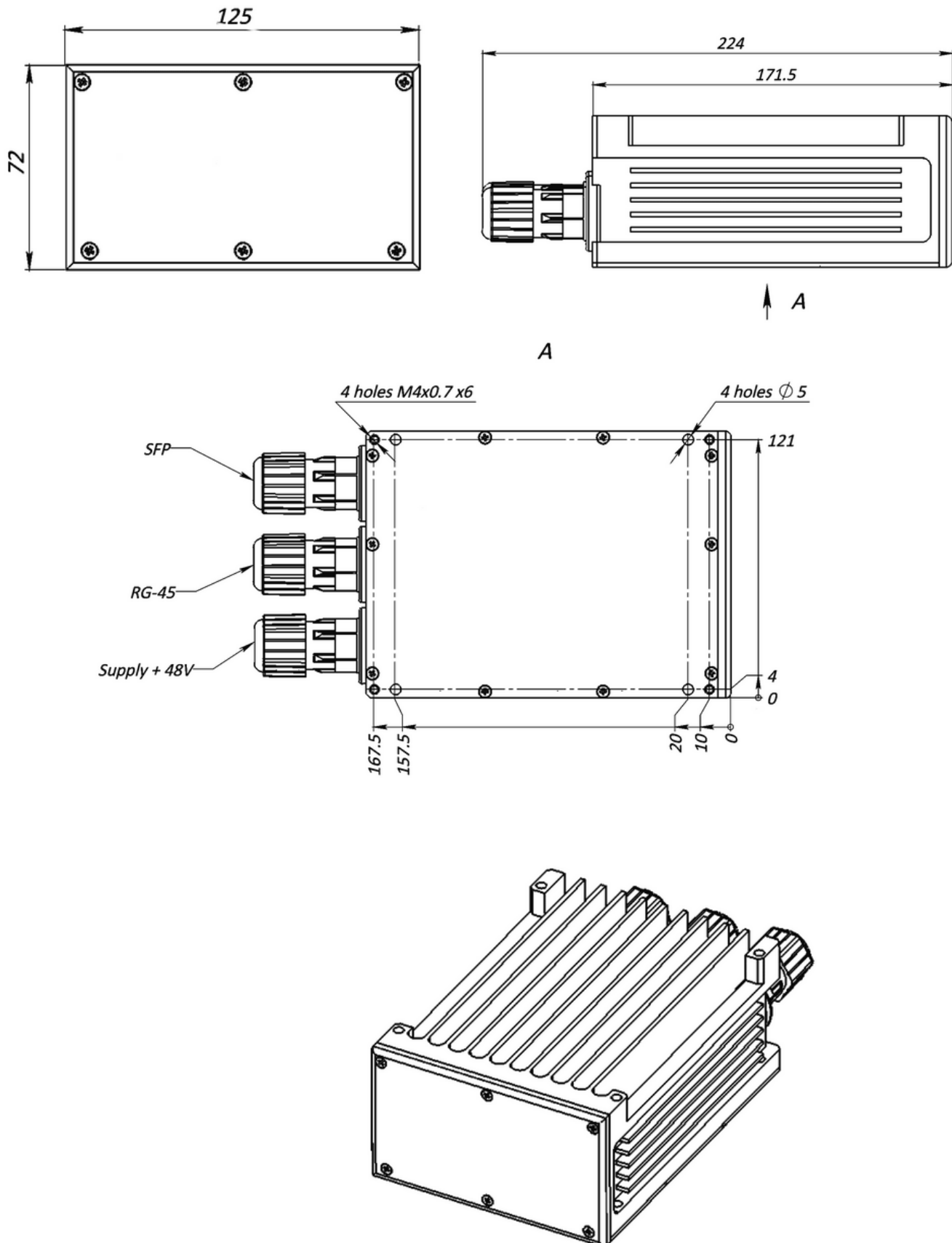
Aluminium case with radiator sections for good cooling of electronic components

Three sealed cable outlets with connectors according to IP-65/IP-68 protection class:

- SFP+ 10GBase-LR/SR data socket
- 1000Base-Tx monitoring socket (PoE enabled)
- DC power socket

- The standard case has 4 points for fasteners with  $\varnothing 5$  mm holes
- It is possible to manufacture a custom case according to vehicle design

## DIMENSIONAL DRAWING OF PRODUCT IN STANDARD CASE





# 10 GBPS WIRELESS UPLOAD/DOWNLOAD CONNECTIVITY AT DEPOT

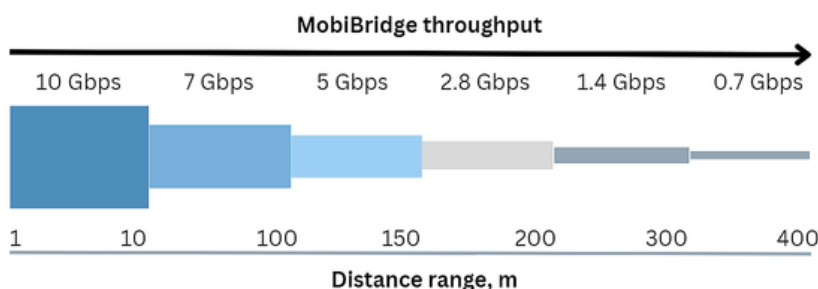


MobiBridge 10G is the industry-first 10 Gbps per channel radio designed to download and upload video, data and other content to light rail, ferries, metro trains and buses at depots and ports, as well as on stops along the routes.

Railway operators can install radios between carriages to create an end-to-end 10 Gigabit network throughout the train. Due to the compact size of MobiBridge 10G, it is convenient for frequent rearrangement of carriages depending on the needs of a particular route.



## MobiBridge 10G Specifications



Maximum throughput

Distance range

Unlicensed band

Occupied bandwidth

Ethernet ports

Antenna type

Antenna scanning sector

Ethernet data streams

Power over Ethernet

Enclosure protection

Ambient temperature

Relative humidity

Enclosure size

10 Gbps full duplex (within 0.5 to 10 m range)

0.5 to 400 m

57 to 71 GHz

7x 2000 MHz with adaptive modulation QAM-256 to BPSK

1 x SFP + 10GBase-LR / SR, service 1xCopper 1000/100Base-Tx

Built-in electronically scanned

± 45° horizontal with 18° fixed vertical sector

Transparent for all services Ethernet, Flow Control 802.3x, PTP

PoE cable 30 W, 12 - 75 V DC

IP-65 (optionally IP-68)

-50 to + 60 °C / -58 to 140 °F

up to 99%

172x224x125 mm or custom-designed

