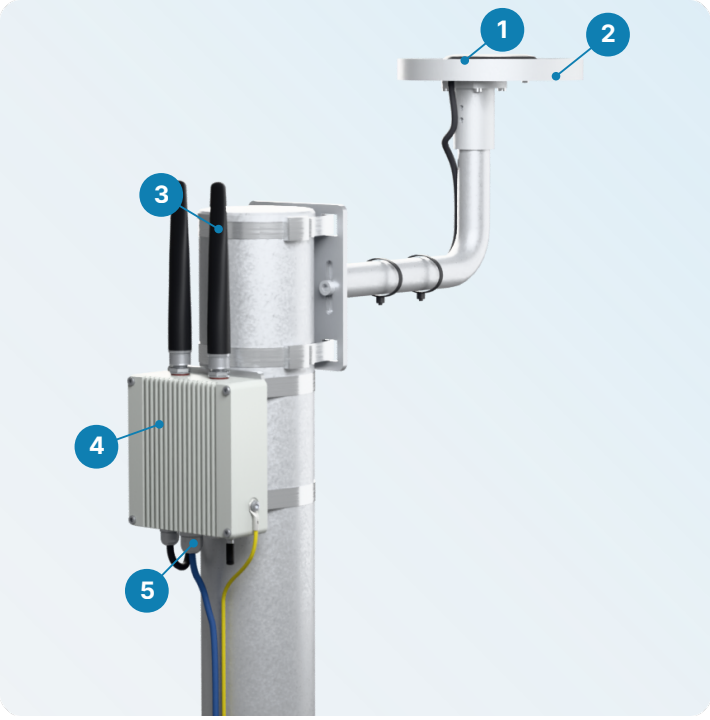
pico-RSU — V2X + GNSS

Compact C-ITS roadside unit for junctions already in service



PARTS

01 **GNSS antenna**

02 **Ground-plane disc**

03 **V2X antennas**

04 **Aluminium enclosure**

05 **PoE cable entry**

APPLICATIONS

- Signal phase
- Pedestrians and cyclists
- Emergency vehicle priority
- Red-light warning
- Speed advice for green
- Roadworks ahead

SPECIFICATIONS

RADIO
ITS-G5 or C-V2X, selectable · 5.9 GHz

MESSAGING
ETSI C-ITS · GeoNetworking, BTP, TS 103 097

POSITIONING
Multi-band GNSS

CONSTELLATIONS
GPS · GLONASS · Galileo · BeiDou

AUTHENTICATION
Galileo OSNMA, signed at the satellite

CORRECTIONS
Designed to serve centimetre corrections

PROCESSING
Messages built and signed on the unit

ENCLOSURE
Die-cast aluminium, passively cooled

DIMENSIONS
140 × 150 × 50 mm (W × H × D)

INGRESS PROTECTION
IP66

OPERATING TEMPERATURE
−40 °C to +60 °C

POWER
PoE, IEEE 802.3af

CABLE ENTRY
M16 sealed gland

MOUNTING
Stainless steel strap · controller untouched

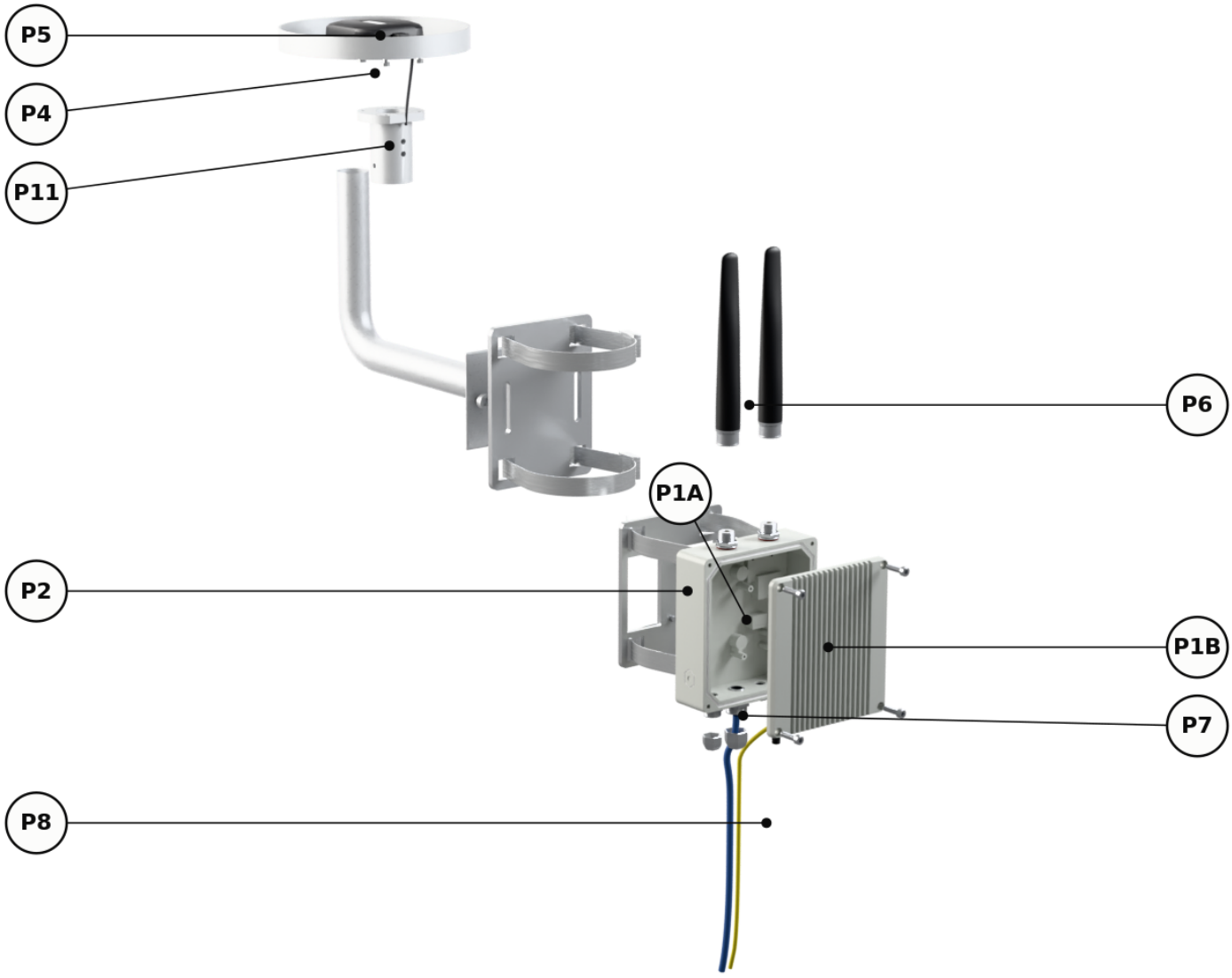
POLE DIAMETER
Ø60 to 200 mm


FRONT


SIDE

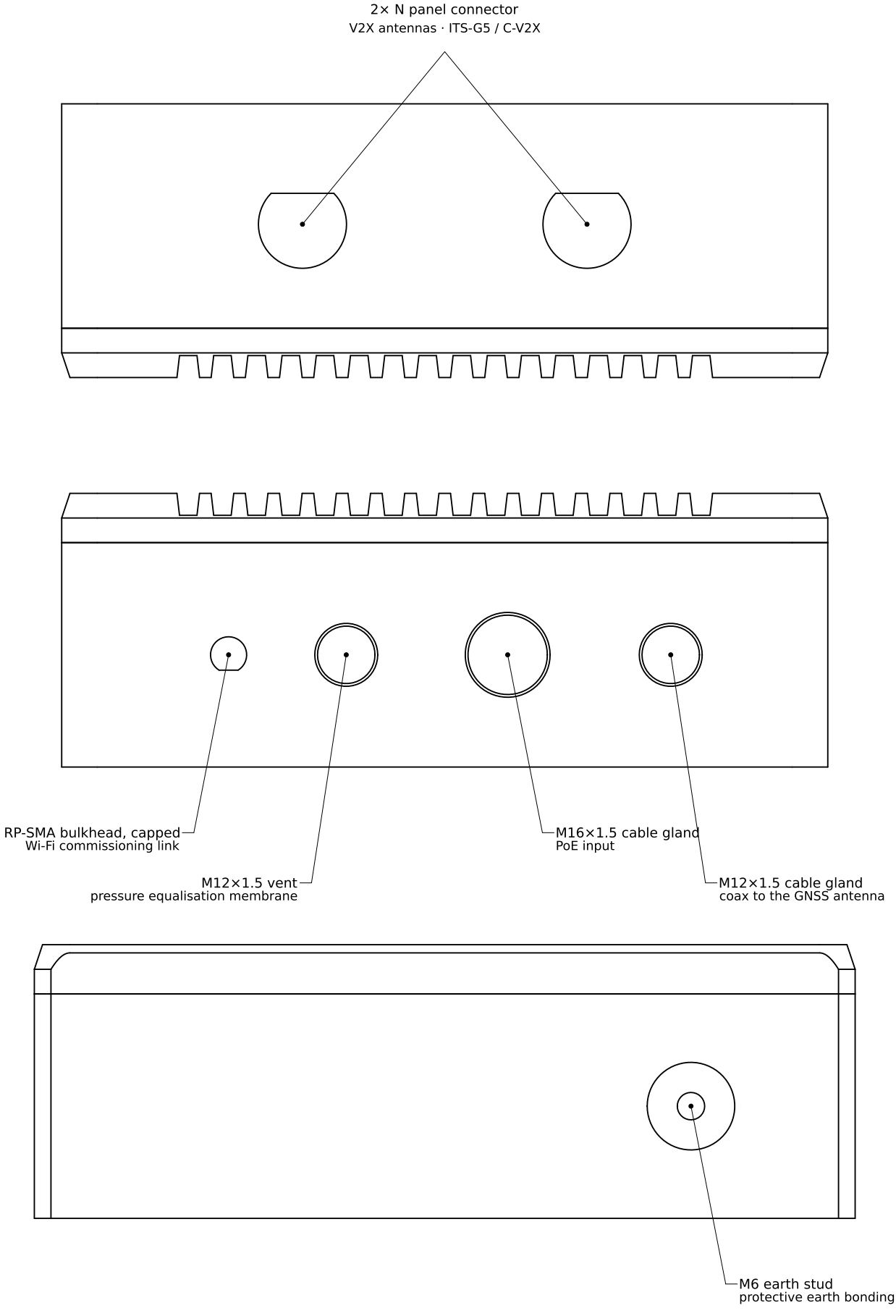

TOP


REAR

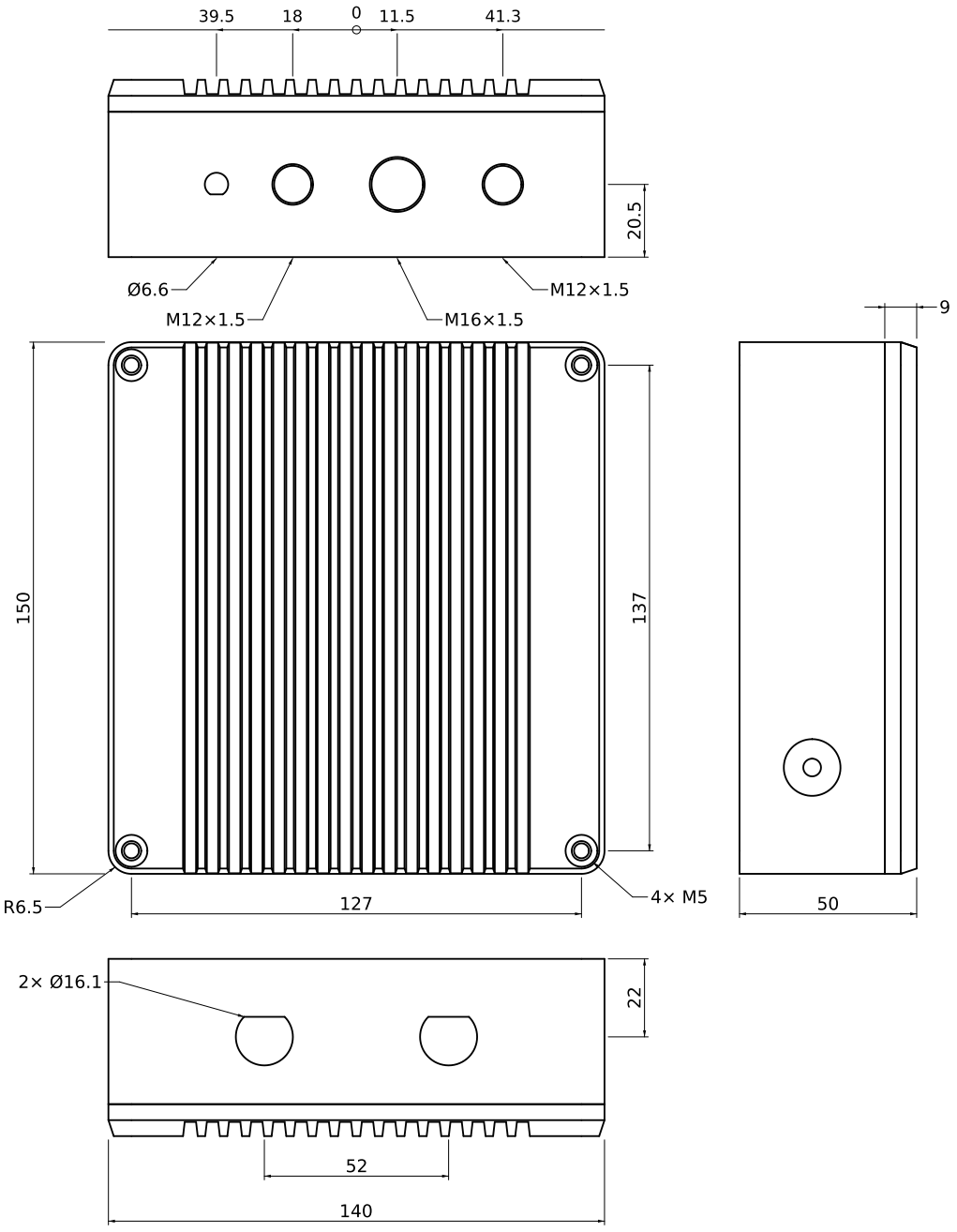


REF	PART	MATERIAL · FINISH	MASS	ORIGIN
P1A	**Enclosure body**	Al 6082-T6, machined · RAL 7035 matt powder coat	**718 g**	Made
P1B	**Lid**	Al 6082-T6, machined · RAL 7035 matt powder coat	**407 g**	Made
P2	**Pole bracket plate**	Stainless 1.4301, 5 mm laser-cut	**393 g**	Made
P4	**GNSS ground plane**	Al 5754, 2.5 mm disc + 2 mm rim · clear anodised 20 µm	**279 g**	Made
P5	**GNSS antenna**	u-blox ANN-MB2-00, all-band, IP67	**260 g**	Off-the-shelf
P6	**V2X antennas (2×)**	5.9 GHz dipole, N male, IP67	**125 g**	Off-the-shelf
P7	**Cable glands & vent**	M16×1.5, 2× M12×1.5, vent, 2× N, RP-SMA	—	Off-the-shelf
P8	**Earth terminal**	M6 stud, bare seat	—	Off-the-shelf
P11	**Mast sleeve**	Al 6082-T6, turned · clear anodised 20 µm	**159 g**	Made

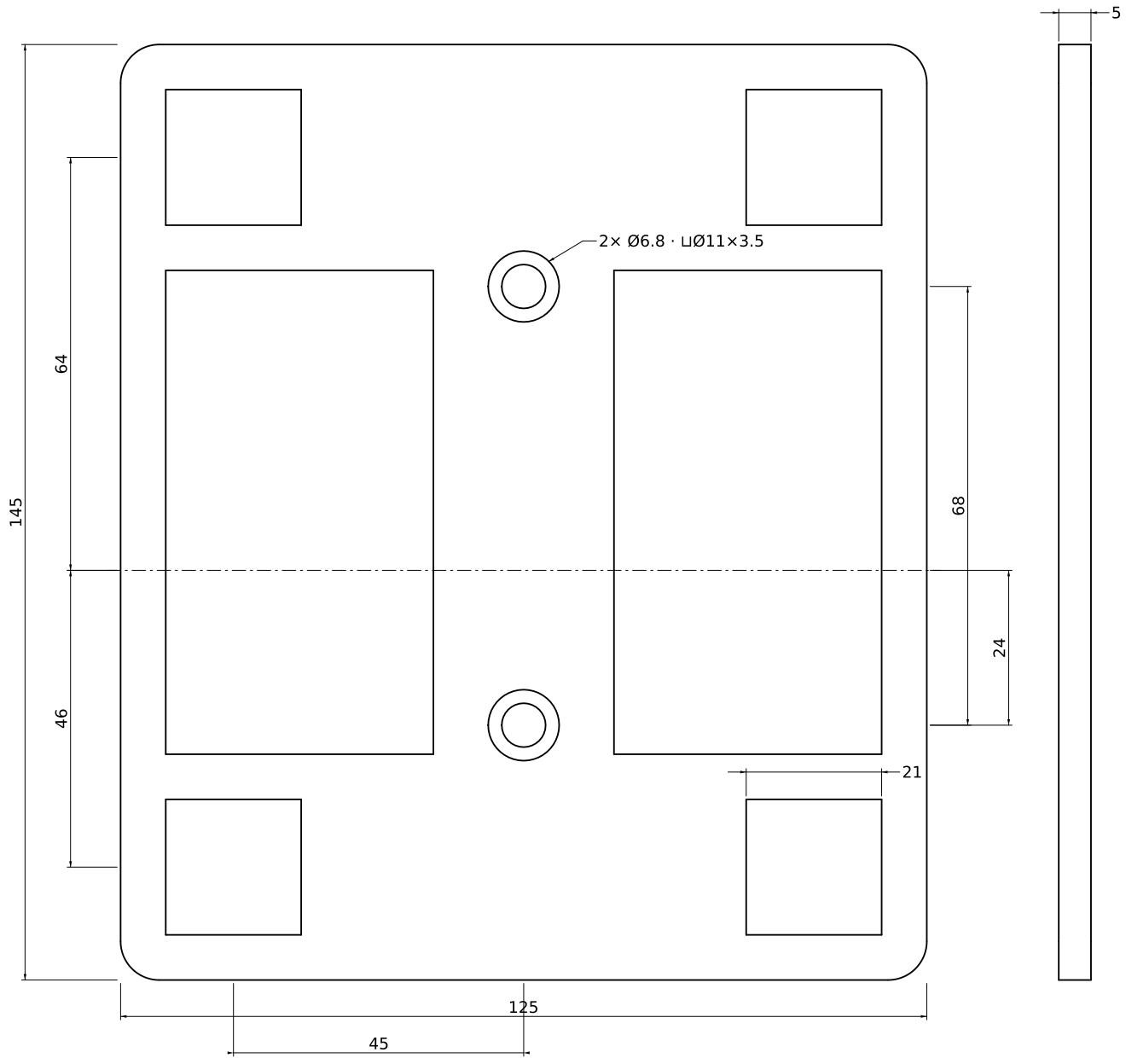
PROJECTION **FIRST ANGLE** SCALE **1:1** UNITS **MM** GENERAL TOLERANCE **ISO 2768-M**



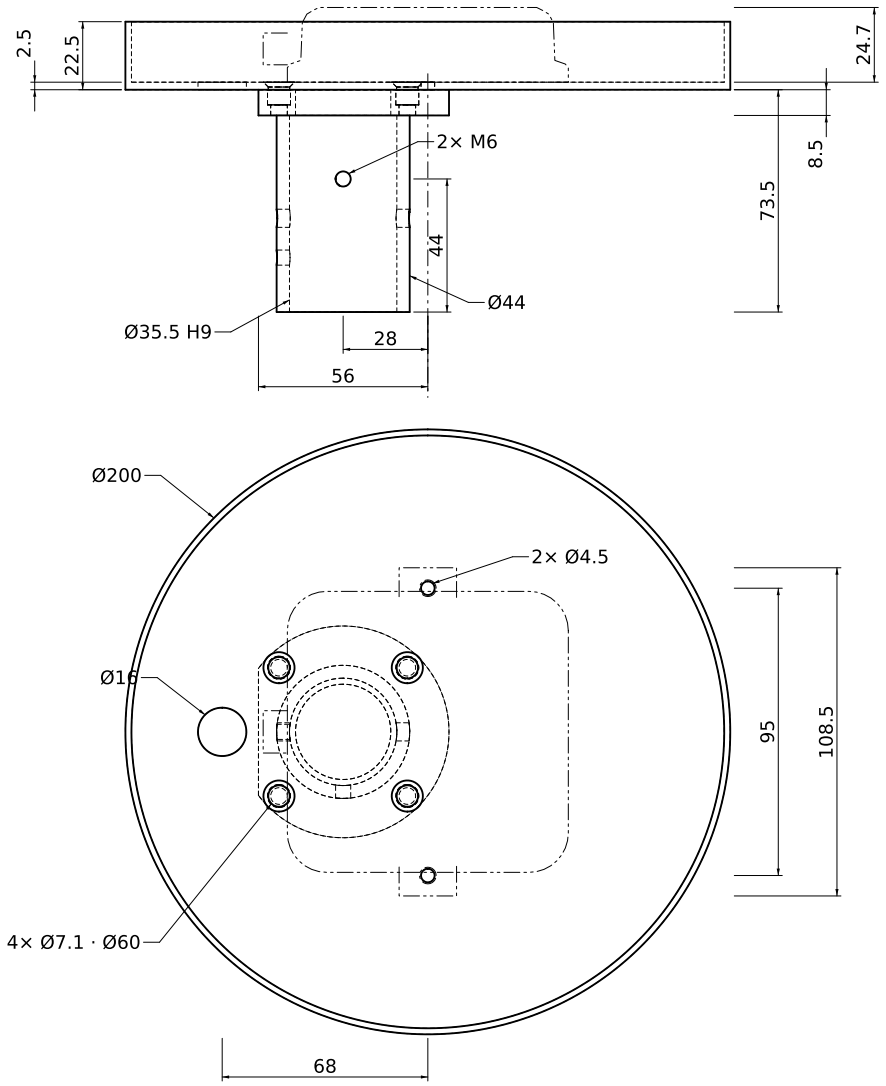
PROJECTION **FIRST ANGLE** SCALE **1:2** UNITS **MM** GENERAL TOLERANCE **ISO 2768-M**



PROJECTION **FIRST ANGLE** SCALE **1:1** UNITS **MM** GENERAL TOLERANCE **ISO 2768-M**



PROJECTION **FIRST ANGLE** SCALE **1:2.5** UNITS **MM** GENERAL TOLERANCE **ISO 2768-M**



GALILEO OSNMA

Galileo signs its navigation message at the satellite. The unit verifies that signature continuously, so a replayed or synthesised signal does not become a trusted position.

C-ITS SERVICES

SI-SPTI	Signal phase and timing
SI-GLOSA	Green light optimal speed advisory
SI-ISVW	Imminent signal violation warning
SI-EVP	Emergency vehicle priority
HLN-APR	Animal or person on the road
RWW	Road works warning