temes
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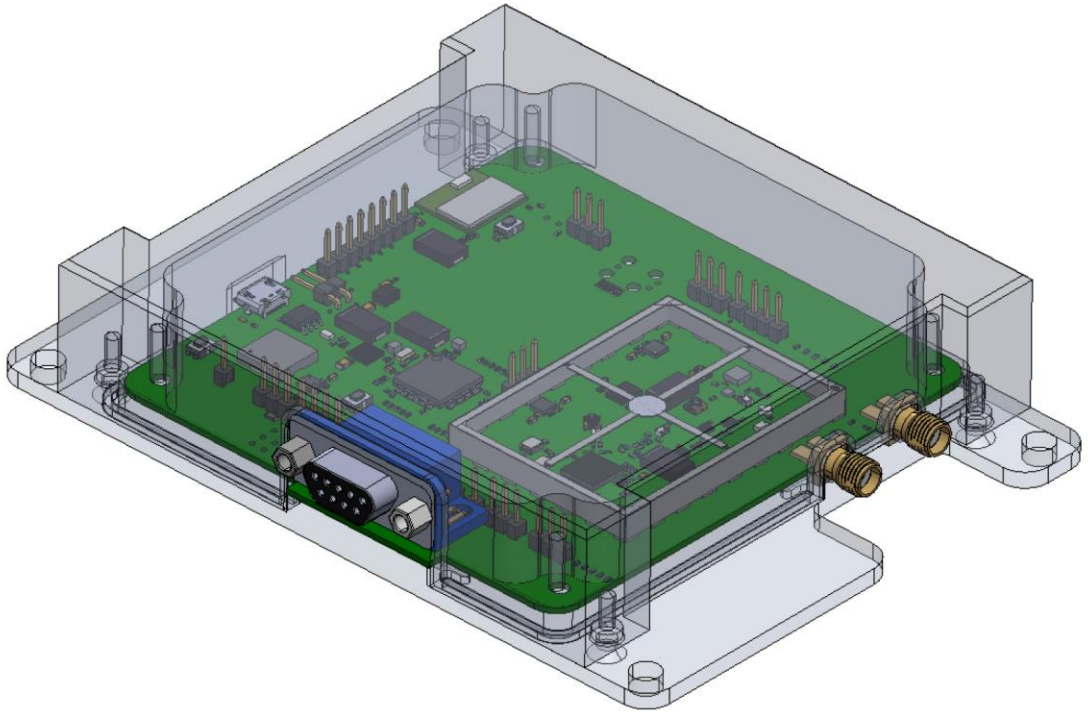
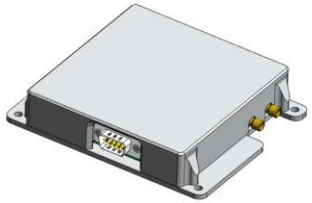


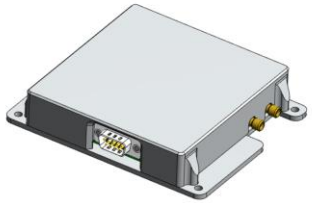
Flyer

TEMES RFID Reader



Main Technical Data

Volume:	140 x 102 x 28 mm
Housing:	Robust Aluminum
Weight:	ca. 590 Gramm
Temperature:	- 40° C to + 70° C (operation)
Protection:	IP 54
Antenna Connection	2 x SMB Connector (50 Ohm)
Power Consumption	300 mW (60 mA @ 5 V DC)
Transponder Population	64 Tags / Second
Transponder Protocol	EPC Class 1 Gen V2
Protocol Mode	SCAN
RF Output Power	0,5 W
Interfaces	RS 232, USB (Optional)
Frequency	840 to 960 MHz
Max Reading Distance	> 16 Meters
Bulk-reading Capability	< 150 Transponder / s



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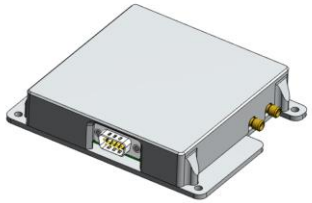
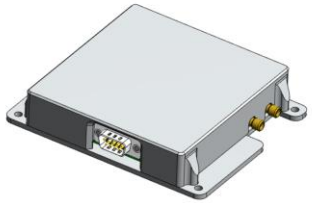
Standards & Safety

- Radio license:
  - EN 302 208 (RED Directive)
  - FCC 47 FCR Part 15
  - IC RSS-GEN, RSS-210
- EMC: EN 301 489
- RoHS compliant
- Other:
  - RSSI
  - Action on EPC
  - Configuration cloning



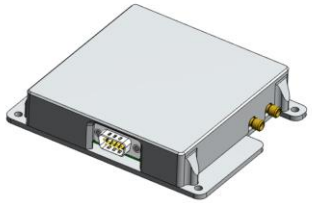
Railway

Isolation	EN 50155
EMC	EN 50121-3-2
	EN 50121-4
Vibration	EN 61373 CAT 1B
Shock	EN 61373 CAT 1B
Wet Heat (cyclic)	EN 50155 / EN 60068-2-30
Fire Protection	EN 45545



Environmental Conditions

- Operating Temperature - 40° C … +70° C
- Storage Temperature - 40° C … +85° C
- Relative humidity 5 % … 95% (non condensing)
- Vibration EN 60068-2-6; 10 Hz … 150 Hz: 0.0075 mm / 1 g
- Shock EN 60068-2-27; Acceleration: 30 g



Description:

The housing of the Temes RFID Reader was specially developed for the rough use in the railroad. The Reader meets all typical railroad requirements in terms of shock and vibration, humidity, etc up to fire resistance. The selection of all components allows the use in a very wide temperature range from – 40° C to + 70° C.

The Reader provides high RF power and long-range reading capabilities.

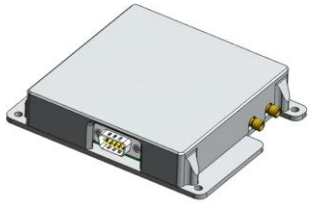
It is controlled by a graphical user interface (GUI) running on any PC. The GUI is included in the scope of delivery.

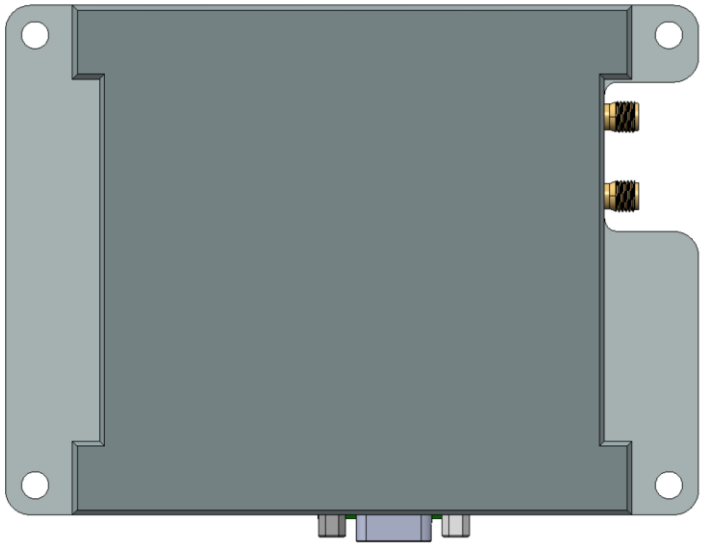
The reader provides two SMA antenna interfaces (50 Ohm) that can be controlled by the GUI. It allows frequency channels from 840 to 960 MHz.

Highlights:

- The device is designed for use at high speeds. It detects all tag- information error-free up to speeds > 100 km/h
- Very low power consumption < 300 mW (powered via RS 232)
- Very robust design tailored for railroad applications

Connection





HF-Antenna connect

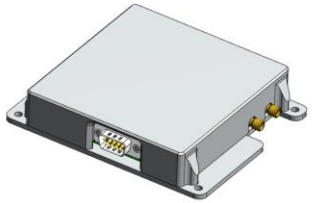
SMA 1

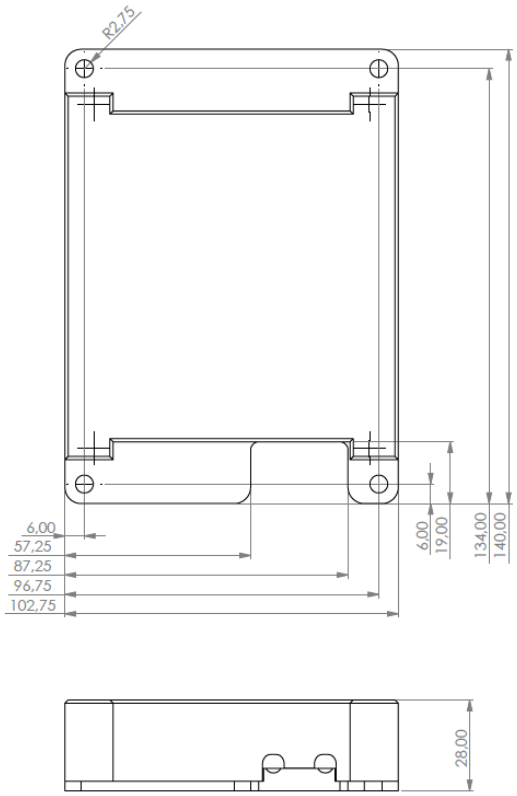
SMA 2

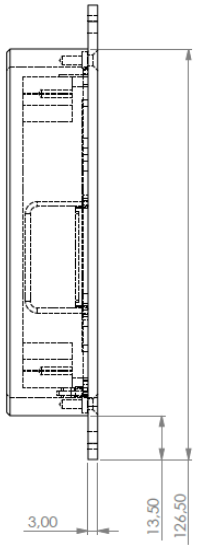
Data Interface

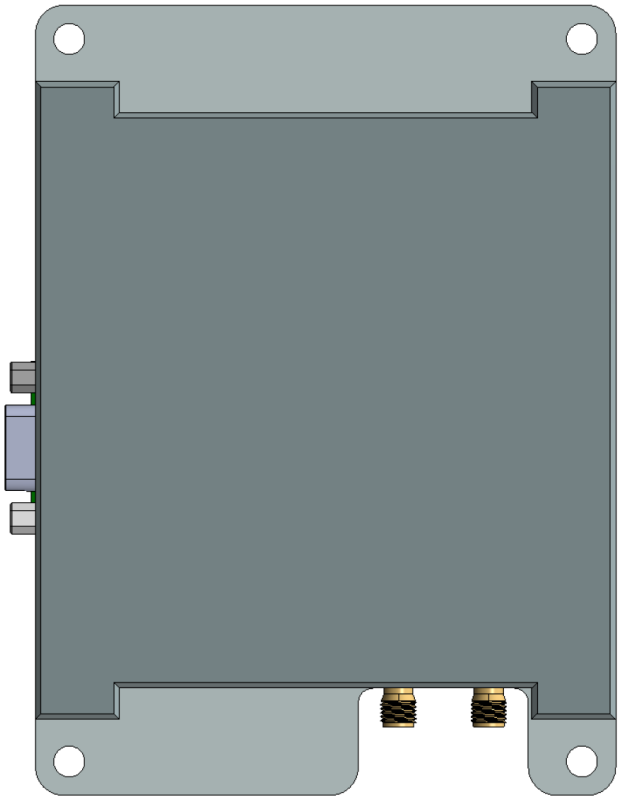
RS232
&
5V Powersupply

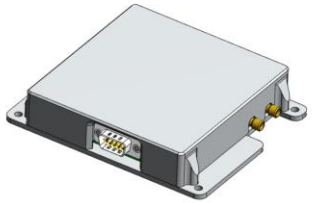
Mechanical Design







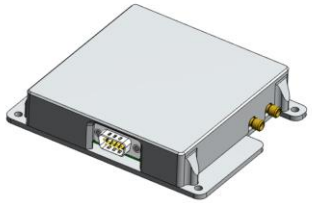




References

- Siemens Test Track Wildenrath
- London DTUP (Underground)

RFID-Board without housing (on the right) connected to a fitting antenna (left)



Version 10

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