

M9.1 Data sheet Specific Transmission Module

ATBEG/Vv

Data sheet for STM ATB

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1 Specific Transmission Module ATBEG/Vv


 **Definition, STMA-81507 -**

Figure 1 STM ATBEG/Vv



STMA-78247 - This STM ATBEG/Vv has been developed to be used with any TSI CCS Baseline 3 Release 2 compliant EVC adhering to the standardised Profibus interface compliant with the TSI CCS subsets 035, 056, 057, 058 and 059 (set of specifications #2). The unit has been developed in accordance with EU railway standards as a generic onboard ATP system to be compatible with the ATB-EG requirements from Dutch National Regulations and the ATBVv system description. This STM ATBEG/Vv is suitable for application in any railway vehicle. It is equipped with versatile interfaces for power supply, brake-sensors, external cab-audio and all currently available ATB-EG antenna coils. The designed system lifetime is 30 years.

The STM ATBEG/Vv has been engineered to be the smallest line side replaceable unit. In case of a defect it can be replaced within 5 minutes. The system does not require any specific configuration, making it a uniform system for any rolling stock vehicle. The vehicle/train specific information is received from the EVC. Because there is no need for periodic calibration, the maintenance costs are minimized. [🟢 Verified]

2 Characteristics of the STM ATBEG

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Characteristics of the STM ATBEG

Dimensions	Enclosure (LxWxH)	Installation dimensions (LxWxH)
	220 mm (depth) x 70 mm (width) x 132 mm (height = 3HU)	230 mm x 70 mm x 120 mm
Power supply requirements	Supply voltage	Average load
Nominal characteristics	24 – 110 V _{DC}	20W
Interfaces	Type	Connector
STM ATBEG <=> <u>ETCS onboard</u>	<u>Profibus</u>	1 male SubD-9P, 1 female SubD-9P
STM ATBEG <=> <u>Analog inputs</u>	ATB antenna's, <u>pressure sensors</u>	1 male SubD-15P, 1 female SubD-15P
STM ATBEG <=> <u>Power and Digital I/O</u>	PSU, digital I/O	1x DIN41612-F-48P
RAMS		

[ Verified]

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MTBF, excluding protective devices (*): 189.602 hour.

(*) protective devices, i.e. over-voltages protection, is excluded as the fault rate of those components depends on the frequency with which over-voltages are caused by the vehicle. In case of the absence of over-voltages the impact on the MTBF is negligible.

The STM ATB doesn't require preventive maintenance (except in case the parallel EB output is used), nor vehicle specific configuration.

The STM ATB safety critical functions comply with SIL3. [ Verified]