

Standard Transmission Module ATBEG/Vv

Product sheet



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. 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 National Regulations. 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 has been engineered to be the smallest line side replaceable unit. In case of a defect it can be replaced within 5 to 10 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.

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 <=> ETCS onboard | Profibus | 1 male SubD-9P, 1 female SubD-9P |
| STM ATBEG <=> Analog inputs | ATB antenna's, pressure sensors | 1 male SubD-15P, 1 female SubD-15P |
| STM ATBEG <=> Power and Digital I/O | PSU, digital I/O | 1x DIN41612-F-48P |
| RAMS | | |
| Reliability | <i>t.b.d.</i> | |
| Availability | <i>t.b.d.</i> | |
| Maintainability | MTTR 10 min | |
| Safety | SIL 3 | |
| Environmental conditions | Minimum | Maximum |
| Ambient temperature | -25 °C | +85 °C |
| Storage | | |
| Applicable regulations | Compatibility | Certified |
| EU regulations for STM | TSI CCS 2016-919-EU | Baseline 3 release 2 (Subset-035, 056, 057, 058, 059) |
| EU regulations for Restriction of Hazardous Substances (RoHS) and materials (REACH) | 2002/95/EG 2011/65/EU 2006/1907/EU | |
| NL regulations for ATB-EG onboard equipment | Regeling Indienststelling Sporvoertuigen 2016 | IENM/BSK-2012/28591 amended IENM/BSK-2016/299765 |
| Railway standards | Certified | |
| | EN50155, EN50159, EN50121, EN50124, EN50125, EN45545 | EN50126-1, EN50126-2 EN50128, EN50129, |
