



TPWSfour EVO

Upgrading to TPWSfour Evo Control Unit



UNIPART
RAIL

Upgrading to TPWSfour EVO Control Unit

Since its launch in 2012, the Unipart Rail TPWSfour Control Unit has proven its reliability in service, with multiple versions of the Classic and Classic Plus Serial variants developed over the years.

In 2020, we introduced the TPWSfour EVO Control Unit, an upgraded model designed as a direct replacement for the existing units, maintaining the same dimensions, fixing points, and electrical connections.

Hardware

- FPGA upgrade for reprogramming capabilities
- 90% of the Electromechanical relays have been replaced with Solid State Relays, which have no moving parts and increased reliability
- Opto-Isolated inputs provide better immunity to external noise
- Brake Relay upgraded with a force-guided safety relay
- EMC Improvements
- Mil-C connector type changed to mitigate the potential risk of contact damage from coupling
- Sub-assembly standardisation between product variants
- Addition of the health and PUT status outputs to the Classic variant

The EVO Control Unit meets the latest standards, including GERT8075 issue 4, RIS-0775-CCS issue 3, and is ISV certified. For further details, please refer to data sheets PIC037-254 and PIC037-255.

The updates implemented are categorised as hardware, firmware and assessments.



Firmware

- False AWS failures caused by the incorrect power up procedures mitigated, increasing the train availability
- TPWS Aerial self-test changed to a two-level test with improved timings, to reduce occurrence of false fails
- EMC improvements
- Classic and Classic plus Serial main FPGA standardised
- AWS Visual Indicator (sunflower) state during ETCS suppression changed to All Black to meet required standards

Direct replacement part numbers

Variant	EVO	Previous
Classic - with handles	062/016316	062/015720 062/015820
Classic - with no handles	062/016317	062/016030
Classic - plus serial	062/016320	062/016141

19" Rack versions are also available



For more information, please get in touch

Unipart Rail

enquiries@unipartrail.com

www.unipartrail.com