

Electronic Standard & Extra Strength AWS Receivers

Information & Data Sheet

Brief Technical Specification

Receiver Supply	11.5 VDC to 13.5 VDC (12.5 VDC nominal) Reset 32 VDC to 75 VDC (40 VDC nominal)
Receiver Current	300 mA at 12 VDC. Reset 3.5 mA (idle), 25 mA (Reset Line)
Size	(W) 230 mm x (L) 275 mm x (D) 165 mm
Weight	Approximately 6 kg
Environmental Temperature Limits	-25°C to +55°C (EN50155)
Transient & Surge Testing	EN50155
Vibration & Shock	EN61373
EMC	EN50121-3-2
Warranty	18 months
Identification	Standard Strength AWS Receiver – Black Mounting Plate Extra strength AWS Receiver – White Mounting Plate

Static Receiver Mounting Heights

Standard Strength Receivers – 133mm to 171mm.

Extra Strength Receivers – 156mm to 200mm.

All heights are above rail level measured to the base of the receiver.

For information on these products, please contact: –

AWS & TPWS Cell
Unipart Rail
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Crewe
Cheshire
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The Reliable Alternative

Approved for operation up to 125 mph

Unipart Rail Electronic AWS Receiver

The Unipart Rail Electronic AWS Receiver is a major step forward in reliability and performance.

Many advances in design philosophy and principal design criteria have been made.

- The electronic receiver's solid state design replaces all moving parts in the conventional reed relay based receiver, leading to greatly increased reliability and performance.
- Overhaul requirements are reduced with maintenance limited to functional testing only.
- The receiver circuitry is encapsulated in a tough resilient polyurethane potting compound for added protection.
- Strong lightweight materials have been used for durability and robustness.
- Reduced unsprung bogie weight; the receiver weighs only 35% of that of the conventional AWS receiver.
- Modern military specification (MIL-C-5015) connectors are used to interface with the vehicle AWS sub-system to further increase reliability.
- Reduced vehicle unavailability and lower maintenance costs.

Options Available

The electronic AWS receiver is available either with a high quality electrical connector or with an integral cable assembly.

The integral cable receiver variant is available with cable lengths up to 4 metres. The cables can be terminated to the vehicle using either –

- conventional 5-way 'C' spanner type AWS receiver connectors
- MIL-C-5015 military specification connectors, or
- Hard wiring directly into the receiver junction box.

A compatible TPWS aerial mounting plate, Cat N° 062/009008, is available if required.

Standard Strength Receiver Product Approval

Delta Rail has issued a Product Acceptance Certificate Reference LD53027001- PA006 for the Unipart Electronic AWS Receiver. This receiver is approved for use as a 'standard receiver' and a 'high speed receiver' as detailed in Specification BR1944.

Extra Strength Receiver Product Approval

Network Rail has issued a Product Acceptance certificate No ESRP/0677 for the Unipart Rail 'Extra Strength' Electronic AWS Receiver. This receiver is approved for use on the following vehicles: Class 455, 465 and 508.

Note: Extra Strength AWS receivers must NOT be installed within existing receiver screens.

Routine Maintenance

The Unipart Rail electronic AWS receiver only needs the regular system testing currently performed.

Unipart Rail recommends that receivers exhibiting signs of substantial mechanical impact damage in the following categories be immediately replaced if:

- The receiver mounting plate is bent or deformed affecting the position or alignment of the receiver.
- The receiver shows signs of mechanical damage that may have penetrated the outer casing or that may adversely affect the integrity of the receiver assembly.
- The integral receiver cable conduit assembly shows signs of damage.
- There is evidence of movement of the receiver housing on the receiver plate.