

AY-SIGNAL

- Used as a block protection or at marshalling yards
- Function as either main signal, distant signal or shunt signal

 **VRS Railway Industry**



PRODUCT BENEFITS

- ✓ Most commonly used main signal and distant signal on Dutch railways
- ✓ Very reliable and energy efficient due to VIRLU210LED units
- ✓ Signals are virtually maintenance-free due to high degree reliability
- ✓ Good visibility under all weather conditions

MAIN SIGNALS AND DISTANT SIGNALS

Most frequently used main signals and distant signals on Dutch rail network, specified by national regulations. Reliable with a long service life, high visibility and low-maintenance. Main signal features 3 colour aspects: red, yellow and green. Distant signal consists of 2 colour aspects: yellow and green. The 'release shunting' signal uses a 4 aspect signal, with additional white aspect. Upon client request, VRS can deliver 1, 2, 3 or 4 aspect variants, in every possible colour combination.



AY signals can be mounted on posts and gantries. Post-mounted signals can be supplied with platform and ladder, and can also be supplied in combination with a Matrix Signal Generator (MSGw2).

Shape, light colours and light brightness can be tailored to specific customer requirements.

Technical Specifications

Areas of application	1500V and 25kV zone
Supply voltage	110V/80V 75Hz (day/night)
Isolation voltage	3kV (1 minute)
Luminous intensity	220cd (+30% / -15%)
Luminous intensity distribution	wide beam as per EN12368
Light rise and fall time	< 20ms
Phantom ratio	> 5 as per EN12368 class 2
Climate test	as per IEC 60068-2-38, additional till -25°C
Operating temperature	-25°C - +65°C
Storage temperature	-30°C - +80°C
Shock and bump test	as per IEC 571
EMC Compatibility	as per EN 50121-4
Impact resistance	IR3 as per EN12368
Ingress protection	IP54 as per EN60529 tests 13 and 14
Service life	15 years

Lichtkleur conform CIE S 004/E-2001

Red	Red Light signal colours Class A with restriction $y \leq 0,295$
Yellow	Yellow Light signal colours
Green	Green Light signal colours Class A
White	White Light Signal Colours, Class A, with restriction $x \leq 0,420$

VIRLU 210

Capacity	100 Watt
Voltage:	110 ± 10% V AC
Supply voltage, dimmed:	80 ± 10% V AC
Frequency:	50 and 75 Hz ± 4%
EMC compliance	as per ENV 50121-4 + RLN00007 version 3
MTBF	> 10.000.000 hours (calculated as per IEC 1709/SN29500)