



DayCor® RAIL



RAIL is the most reliable and sensitive corona and arcing detection system designed for railways special needs.

RAIL is a ruggedized system, equipped with shock observers, and capable of high speed automatic detection of corona and arcing.

RAIL provides high resolution video output of remotely inspected objects with high signal to background ratio.

RAIL's reporting software renders automatic straightforward reports.

- Corona detection highest sensitivity
- Automatic corona detection
- Automatic UV events counter
- Auto focus of the UV and Visible channels
- Customized to local specific needs

- Automatic report generation
- Positioning systems integrated
- Reporting software - multilingual
- Digital recording

RAIL Best Performance for High Speed

UV sensitivity of 3×10^{-18} watt/cm² enables detection and capture of distant corona discharge while high speed driving up to 300 km/h without smearing the output image and without missing corona events. Automatic UV events counter for estimation of the corona strength.

RAIL Automatic Mode of Operation

Rail is designed to be a stand alone application, automatically operated with no supervision or operator. On any train.

RAIL Rugged and Stabilized

Shock observers and vibration attenuation components support high quality data acquisition of inspected hardware independent of locomotive's movements.

RAIL Reliable Technology

Rail exclusive lenses provide high pinpointing resolution that enables accurate corona detection of distant objects and reliable results.

RAIL Data Processing & Storage

Detected corona is recorded, processed automatically into reports and stored in DVD-Video movie format with positioning and date & time indications.

RAIL - Customization Options

Rail is customized to accommodate for specific needs and platforms.

UV - Optical Properties

Minimum UV Sensitivity	3×10^{-18} watt/cm ²
Field of View H x V	5° x 3.75° or 7.2° x 5.4°
Detector Life Span	No degradation
Focus	Full auto focus for UV and visible channels
Focus Distance	3m to infinity

Visible - Optical Properties

UV/Visible Overlay Accuracy	Better than 1 miliradian
Minimum Visible Light Sensitivity	1 Lux
Video Standard	Full PAL or NTSC standards

Controls & Operation

Method	Automatic
Functions Activation	Automatic

Environmental

Storage and operation Temp	-20°C up to +55°C
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Data Storage

Media	HDD
Video Format	Digital
Storage Capacity	Customized
Report Format	html

Physical Characteristics & Power Source

Nominal Power Consumption	12V DC, 16 Watts
Power Source	Compatible to train power system

Display

Type	External
External Display	Composite PAL or NTSC via BNC jack

Rail scheme of operation:

