

# IP Based Forward Facing And Rear Facing Camera For Rolling Stock

eyeTrain is designed to rail group standards, and incorporates the very latest in video, storage and communications technology. The eyeTrain range offers digital (IP) technology matched to the harsh environment of rolling stock applications, providing the highest performance and resilience on the market.



## Specifications

### General

Type	Forward Facing & Rear Facing Camera for Rolling Stock Applications
Manufacturer	Petards
Part Number	FFC-SI-352
Form Factor	Robust Metallic Enclosure
Dimensions	68mm (H) x 88mm (W) x 98.6mm (D) (excluding lens)
Weight	0.3Kg



### Specifications

#### Sensor

Type	1/3" Progressive Scan CMOS Sensor
Signal to Noise Ratio	50dB min
Dynamic Range	120dB Min
Sensitivity	0.001 lux min illumination F1.4
Resolution	1920 x 1080p (3MP)
Lens	12mm
Viewing Angle	26.5°(H), 14.5°(V) @ 1920 x 1080 Resolution

#### Data Transmission

Ethernet	100Mbit/s full duplex
Video Frame Rate	Up to 25fps
Video Resolution	1080p
Compression	H.264 and MJPEG

#### Environmental

Temperature Range	-25°C to +85°C
Power Supply	PoE to IEEE802.3af Mixed DC & Data (mode A)
Power Consumption	3W
Ingress Protection	IP54



### Specifications

#### Standards Compliance

EN50155	Railway applications, electronic equipment used on rolling stock
EN50121-3-2	Railway applications, EMC part 3-2 rolling stock apparatus
RIA 12	General specification for protection of traction and rolling stock electronic equipment from transients and surges in DC control systems
EN60529	Degrees of protection provided by enclosures
EN61373	Functional and random vibration tests
EN60068-2-1	Cooling tests
EN60068-2-2	Dry heat tests
EN60068-2-30	Damp heat tests
EN60068-2-27	Shock tests
EN61000-4-2	Electrostatic discharge immunity test
EN61000-4-3	Radiated, radio-frequency electromagnetic field immunity test
EN61000-4-4	Electrical fast transient/burst immunity test
EN61000-4-5	Surge immunity test
EN61000-4-6	Immunity to conducted disturbances, induced by radio frequency fields
ENV50204	Radiated electro magnetic fields from digital radio telephones/ immunity tests