

TECHNICAL SPECIFICATION

PantoTrace 2.0



Hardware Specifications

Main Purpose	Robustly identify train vehicles with IR illuminated images of the full side of the train - Prepared for RFID reader
Placement	Trackside, approximately 1.5 m above track level
Camera Type	Dual Global shutter cameras with built-in NIR filter
Illumination	High power infrared flash – Invisible to humans
RFID Reader Interface	Prepared for RJ45 PoE connection for seamless integration
Max Train Speed	+250 km/h
Power Supply	1 x 230 V, 4 A, max. 500 W (consumption without heater: ~15 Watt)

Software Specifications

OCR Algorithm	Deep learning-based OCR for accurate text recognition
Text Recognition Accuracy	>97%, depending on letter contrast and dirt
User Interface	PantoClient – A web-based client for the PantoSystem PantoAPI – Http based API, suitable for system integration
Train ID data	RFID values, OCR based vehicle number, video from vehicle side
Data processing	Partly on device and partly on server
Connectivity	Ethernet, or cellular connectivity options

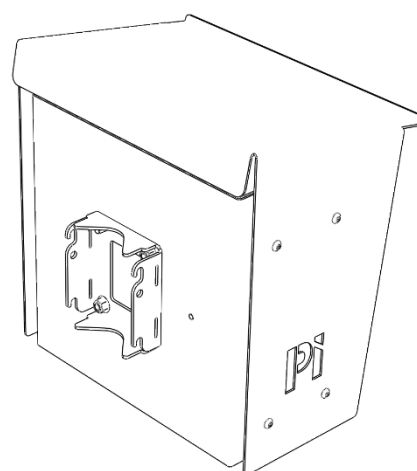
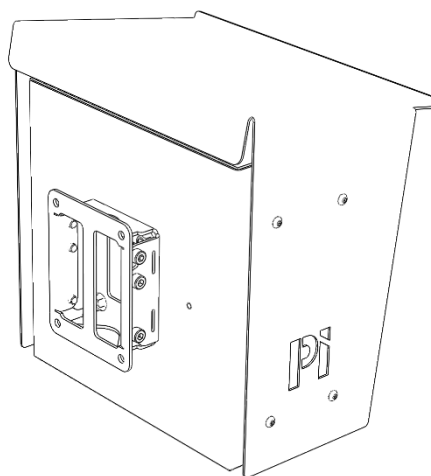
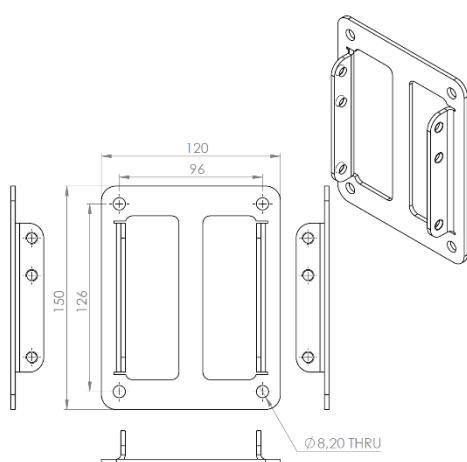
Physical Characteristics

Dimensions	375 mm x 340 mm x 245 mm (H x W x D)
Enclosure Material	Stainless Steel with aluminium shield, IP66
Mounting Options	Various mounting options for easy installation
Maintenance	Easy to maintain and service with minimal downtime
Environmental	Operating temperature range: -20°C to 50°C

INSTALLATION POLE OR WALL MOUNTING

Wall mount with detachable bracket

Pole mounting, prepared for metal strips



PANTOTRACE DIMENSIONS

