



Project Profile: Queensland Rail PIS/CCTV

Customer:	Queensland Rail
Project Type:	Refurbishment
Operator:	Queensland Rail
Franchisee:	Queensland Rail line
Train Owner:	Queensland Rail
Train Mfg:	Bombardier
Train Class:	IMU17610
Number of Trains:	135
Number of Cars:	3



System Overview

An integrated passenger information and CCTV system has been fitted to existing rail cars. Controlled by a single TransitCam TC-100 which has been upgraded to support PIS operation, the system allows for digital voice announcements and stopping pattern information to be displayed to passengers via Integrian's internal and external PIS displays. Existing train lines were used where possible to minimize the impact of the upgrade.

Driver control is provided via the use of a compact 8.4" touch screen display fitted to each driver's cab, which allows the driver to configure and control the DVA system, as well as view saloon CCTV camera images. Recording from 4 cameras per carriage is also managed by the TC-100 to a hot-swappable dual-HDD caddy.



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Project Features

- Integrated Passenger Information and CCTV systems in a single controller
- Use of existing train cabling where possible
- Remote control of on-train announcements via back-office application
- Internal and External Destination Indicators
- GPS system
- Fully supports coupled-train operation
- High quality, full color, digital hardware MPEG-4 image compression
- Capture rate of 12.5 frames per second per camera (PAL)
- Resolution of 2CIF
- 140 hours of data storage
- Isolated RS-232 diagnostics and service port
- Storage media operates in overwrite mode with older files being overwritten by current video records
- Local LCD text status display for diagnostics and service
- Configurable car number for incorporation in data files and evidence audit
- 12 Video inputs available, 12 camera configuration
- Time and date received from PIS system over LON network. No time drift, user maintenance or setting requirements for on-train clock calendars
- Internal battery-backed clock calendar maintains time and date while power is off and where PIS signal is not available. Clock calendar is automatically synchronized when PIS signal is next available
- Integrated, 480 line color camera units, electrically isolated, incorporate housing, connector, lens and mounting spacer
- Single coax cable to each camera carries both signal and power
- Local video output can be switched to any camera for camera testing and diagnostics
- Full width 19 inch, 4U rack mount recorder unit



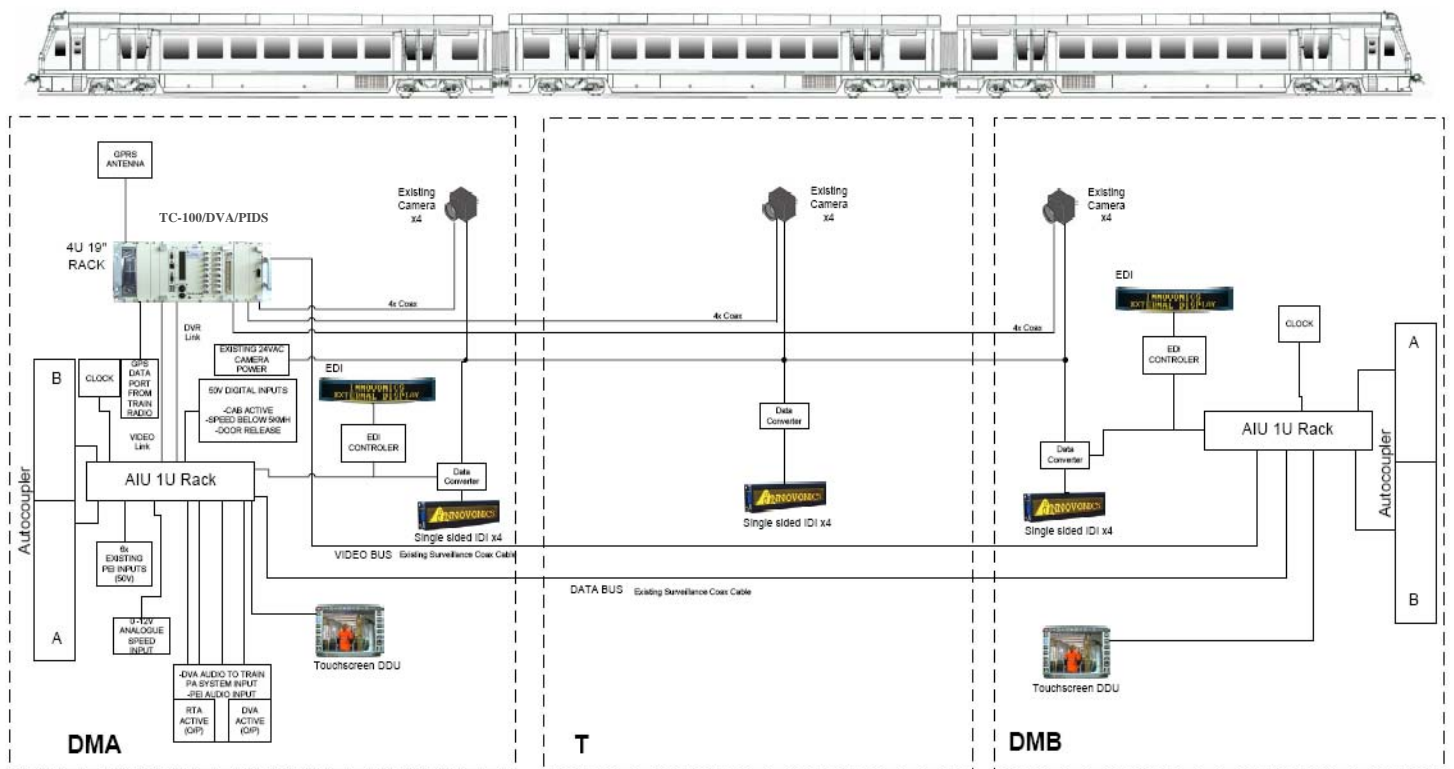
TransitCam TC-100



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System Architecture



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