

Newark Liberty International Airport AirTrain Facility Management SCADA System

The Newark Liberty International Airport is the sixth busiest airport in the nation, serving over six million people every month. In order to transport patrons from the New Jersey Transit Authority rail system, outlying parking lots and rental car agencies to the terminal area, the Authority replaced its bus system with an automated people mover monorail system.

Kapsch provided the Facility Management SCADA System (FMSS), which monitors and controls all power distribution, station fire and station security devices. The system manages various facility and vehicle support systems that are critical to the safe and secure operation of the monorail. The FMSS provides several custom control sequences including detecting and correcting faults, emergency power removal sequences, power factor correction, and guideway and rail heating control.

The system is managed by the Kapsch DYNAC® SCADA software, which monitors and controls remote terminal units located at substations, terminals, and track switches. Field devices including circuit breakers, contactors, power transducers, and fire and security alarms are connected to redundant programmable logic controllers (PLC's) via remote I/O units located at the various stations. Alarm conditions are exchanged with the automatic train control system to provide integrated monitoring and control of the monorail vehicles, guideway and seven stations.

System Features:

- DYNAC® Software
- Redundant Servers
- Redundant PLC's
- Interface to Train Control System
- Monitoring and Control of Stations, Substations and other Facilities

References:

Client: Port Authority of New York & New Jersey

Location: Newark, NJ