RAILWAY

Protecting the Critical Rail Infrastructure

VERTIV.

INCREASED CONFIDENCE IN YOUR ABILITY TO PERFORM WHEN NEEDED BY PROVIDING HIGHLY RELIABLE PRODUCTS THAT PROTECT YOUR CRITICAL RAIL INFRASTRUCTURE

ROLLING STOCK **STATIONS** **SIGNALLING AND CROSSING** **TRACKSIDE**

ROLLING STOCK
• On-hand power back up

PLATFORM VIDEO AND VOICE SYSTEMS
• Monitoring system announcements

CONTROL ROOMS
• Passenger information
• Line monitoring systems

PASSENGER INFORMATION AND ACCESS CONTROL
• Secure power for station control and equipment protection

SCREEN DOOR POWER SYSTEM
• Monitoring door status or signal

TRACK SAFETY
• Signalling and crossings

TUNNEL SAFETY
• Power back-up for ventilation
• Emergency lightning
• Solutions for video, signaling, fire direction

SWITCH CONTROL
• Traffic management

TRACKSIDE IT INFRASTRUCTURE AND TRACK SAFETY
• Signalling and crossings

POWER AND TRANSFORMER STATIONS
• Power back-up

COMMUNICATION
• Solutions for the Telecommunications network

Products and Services tested in the largest rail operators in Europe	Tools and expertise to effectively and efficiently plan maintenance and upgrades	Lower Operating Cost from seamless functional safety, ease of maintenance and reliability

What Is Happening?

Sustainable rail model for growth

With growing focus on sustainability and green credentials, rail operators must seek innovative technologies to increase efficiency and resiliency, while strengthening the overall rail infrastructure

Smarter rail network

Use of analytics, geo-data and new technologies provides passengers with all the information needed for a safer, more comfortable and convenient commute experience

Growing Criticality of Rail Operations

What is Happening?
- Millions of passengers rely on rail services to be efficient and safe for their daily commute
- Failures at any point of the rail network could have safety, financial and regulatory implications

What does this mean for you?
- Rail operators must ensure that the entire infrastructure is working at optimal levels, for availability and safety
- Assets must be protected against disruptions and disturbances

What does this mean for your infrastructure?
- An effective rail system depends on the seamless integration of a number of complex systems
- If one system fails, the whole service can be severely affected
- High efficiency power protection and thermal management solutions for your critical assets

Managing the Complex Rail Infrastructure

What is Happening?
- The complex rail network consists of several disparate infrastructure that needs to be intelligently and efficiently managed
- There could be hundreds, if not thousands of UPSs and batteries and other equipment located in remote locations

What does this mean for you?
- Facility managers must be able to handle managing several areas of the rail network, some even remotely
- Maintenance timeslots must be tightly scheduled and adhered to
- Spare parts must be available when and where needed

What does this mean for your infrastructure?
- Intelligent, remote monitoring must be in place across the network

Smart Solutions

SmartCabinet™
Intelligent, integrated infrastructure in an enclosure

SmartRow™ Plus
Intelligent, integrated infrastructure in a closed line-up

SmartAisle™
Intelligent, integrated infrastructure using row-based building blocks

Infrastructure Management and Monitoring

- The Avocent® MergePoint Unity™
- The Avocent® AutoView switch
- The LCD Console Tray family

- DSView™ Management Software
- Avocent® Data Center Planner

- Avocent® HMX
- Avocent® Switchview KVM Switches
- Liebert® RDU

Thermal Management

Liebert® CRV
- High efficiency at Full and Part Load
- Installs within the row of racks
- Variable speed EC fans and variable capacity scroll compressor

XD Applications
- High efficiency at Full and Part Load
- Installs within the row of racks
- Variable speed EC fans and variable capacity scroll compressor

Power Management

Netsure™ 531 A91
The NetSure™ 531 A91 series embedded high frequency switch mode power supply system was designed based on its years of experiences in development and running to meet the need of to deliver reliable and uninterruptible DC power supply for the LTE in-building solutions, FTTx broadband multi-solutions, macro station and outdoor cabinet.

Surge Protection Device
Defending power, voice and data moving through the network against grid irregularities and dangerous electrical disturbances

ASCO® Model 230
A Surge Protective Device is an economical method of protecting circuitry associated with 120 VAC interconnect signal lines commonly used in traffic control systems.

Critical Power

Liebert® APM™

Liebert® APM™ is the next generation UPS solution based on the scalable power platforms developed by Vertiv. What differentiates Liebert® APM™ from other power protection solutions is its Adaptive Power Manager features.

Chloride® CP-70Z
5 to 500 kVA
Designed to meet the harshest electrical and mechanical conditions in industrial environments

Outside Enclosures

Multi-purpose enclosures for outdoor applications. The outdoor cabinets and enclosures protect an array of electronic equipment at remote sites

Turnkey Data Center

With hundreds of Turnkey Data Center deployed worldwide, Vertiv's solution architecture competency from sales to project services to engineering reduces complexities of building your data centers. We work closely with you and your in-house experts, ensuring your Turnkey Data Center is built according to your specifications.

TRAIN NETWORK IN ASIA

Overview

Minimized downtime in its data center through installation of next-gen power and cooling technologies to support intensive operations and long working hours.

Vertiv Solution
- Liebert® Nxa
- Liebert® PeX
- Avocent® KVM
- Chloride® FP60
- Liebert® APM
- Chloride® FP40
- ASCO® 7000 ATS
- ASCO® 200 ATS
- Liebert® CRV
- SmartCabinet™

THE SAFETY AND EFFICIENCY OF YOUR RAIL NETWORK LIES WITH A STRONG AND RELIABLE CRITICAL INFRASTRUCTURE

Talk to us for your infrastructure requirements: marketing.ap@vertivco.com

NEW NAME. SAME TRUSTED CAPABILITIES. BETTER SERVICES.

EMERSON NETWORK POWER IS NOW VERTIV

We at Vertiv understand your challenges. Built on a longstanding tradition backed by years of service and technology excellence, Vertiv enables you to achieve your business goals. By designing, building and servicing mission critical technologies, we help build the future of the world's critical environments.

EMPOWERING THE VITAL APPLICATIONS OF THE DIGITAL WORLD

We live in a fast-paced society where change is a constant. Today, technology has become so pervasive in our everyday lives that it is something we can no longer ignore. IT is now an integral part of any business, regardless of size and industry. The success of your organization rests on how you are able to efficiently manage your IT resources to support your business strategies and goals.

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