# EMS400V Solution for Indian Communication Sites



## Overview

Our EHV cables are manufactured in the most sophisticated and modern plant, with manufacturing capability from 66 kV to 400 kV cables, as per Indian and global standards.

## Key Takeaways

400V DC power solutions provide efficient, scalable, and reliable power distribution for telecom and data sites in India, supported by leading EMS providers for deployment and integration. Overview of 400V DC Solutions400V DC power systems, such as Vertiv NETSURE 400V DC, are designed to serve as the backbone for telecom and data center sites. These systems offer several advantages over traditional 48V DC setups: Higher efficiency and reduced current: By distributing power at 400V DC, the current is significantly lower compared to 48V DC, reducing cabling requirements and material costs by over 80%.

Modular and scalable architecture: Systems can be expanded or upgraded without disrupting existing operations, thanks to hot-swappable rectifiers and modular design. Integration with existing equipment: Optional 400V to 48V DC-DC conversion allows continued use of legacy 48V DC-powered equipment while leveraging the efficiency of 400V distribution. Centralized battery management: Batteries can be housed in a separate, climate-controlled room, reducing site congestion and improving safety.

High reliability: Redundant rectifiers and full galvanic isolation ensure continuous operation and high availability for critical telecom infrastructure.

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## Benefits for Indian Communication Sites

Implementing 400V DC solutions in India offers specific advantages: Cost savings: Reduced cabling and labor requirements lower both CAPEX and OPEX. Space optimization: Centralized power plants free up equipment room space, which is valuable in urban or high-density sites. Future-proofing: Supports high-power telecom equipment for 4G, 5G, and upcoming 6G networks, aligning with India's expanding communication infrastructure.

Enhanced reliability: Minimizes downtime and improves operational efficiency, critical for sites handling real-time data and grid communications.

## EMS Providers for Deployment in India

## Several Indian EM

S companies can support the design, manufacturing, and integration of 400V DC solutions: Vinyas Innovative Technologies: Offers end-to-end electronic system design and manufacturing services, including PCB assembly, product integration, and advanced test solutions, suitable for telecom power systems.

## Syrma SG

S Technology Pvt Ltd: Provides comprehensive EMS solutions across the product lifecycle, including prototyping, manufacturing, and after-market support, with experience in telecom and industrial electronics. Jabil Circuit Pvt Ltd: Specializes in large-scale EMS solutions for high-volume and high-mix production, capable of supporting 400V DC system deployment.

## Implementation Considerations

When deploying EMS400V solutions at Indian communication sites, consider: Site assessment: Evaluate existing 48V DC infrastructure and determine the need for DC-DC conversion modules. Redundancy planning: Ensure sufficient rectifier and battery redundancy to maintain uptime. Compliance and certification: Verify that all components meet Indian and international standards for telecom power systems.

Integration with monitoring systems: Connect with site management and SCADA systems for real-time monitoring and maintenance. By combining Vertiv NETSURE 400V DC technology with capable Indian EMS providers, communication sites can achieve efficient, reliable, and scalable power infrastructure that supports current and future telecom demands.

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Norden Communication India: Cables, PA Systems

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Currently, Indian Law enforcement and Disaster Relief agencies maintain their own captive network and have VHF/UHF Radios for short distance communication, Satellite/HF for long distance

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