

# UPS SYSTEMS FOR TELECOM AND MOBILE TOWERS

## WHAT'S NEW IN THE MARKET

Some of the latest UPS systems for telecom and mobile towers are compact, have inbuilt chargers, options for external as well as inbuilt batteries, are transformer free, and come in hybrid variants

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For smooth running of a telecom setup and wireless network, there should be a reliable power infrastructure, as power management for outdoor and indoor telecom sites is vital. The requirement for UPS systems in the telecom sector can be broadly differentiated into two categories—active and passive. In the active IT category, power backup systems are required for base transceiver stations (BTS) or mobile towers, mobile switching centres (MSC), base station controllers (BSC) and tower sites. The UPS rating for these requirements varies. For MSCs, the UPS power requirement is in the range of 120-160 kVA; for BSCs it goes up to 40 kVA; and for towers, up to 10 kVA. Also, when the UPS system has to be installed on the tower itself, lower ratings of 1-2 kVA are required. For passive IT application areas, the size of the UPS system required is bigger—400-600 kVA. Apart from these, AC and DC UPS systems are also required for mobile equipment.

### What buyers should consider

So far, legacy UPS systems (centralised large systems) have been used widely. But the trend is changing towards the use of modular, scalable and highly energy efficient UPS systems with N + X redundancy, as well as remote monitoring and control for power management solutions. With such UPS solutions, one can scale up as the load grows, starting off with lower CAPEX (capital expenditure) and OPEX (operating expenditure). According to experts, double conversion online UPS systems are the right choice for the telecom sector.

In mobile towers, operators are more concerned about power saving aspects. Each tower has a transmitter, power supply related equipment, air