



520KW

Total Modular Capacity



178 Days

Record Execution Time



3 Layers

Power Redundancy



\$21 Million

Total Project Cost

INTRODUCTION & CONTEXT

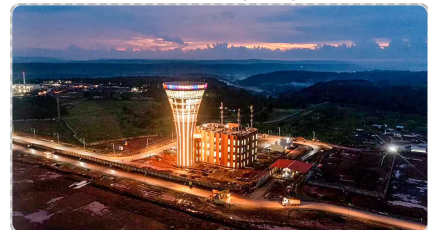
Manohar International Airport, developed by **GMR Goa International Airport Limited (GGIAL)**, is a landmark project in Pernem Taluka, North Goa. Completed on 11 December 2022, operations began on 5 January 2023.

Project Requirement

The primary goal was to ensure an **uninterrupted electrical power supply** for Critical Operations Power Systems (COPS) at the Air Traffic Controller (ATC), ensuring high availability.

VISUALS

ATC Tower - Mopa Airport



BPE Modular UPS Installation

THE SOLUTION IMPLEMENTED

- ✓ **UPS Configuration:** 2 sets of 2 x PS33150 100KW UPS + 1 set of 2 x 30KW UPS
- ✓ **Redundancy:** N+1 at Module Level, N+N at Power Rack Level
- ✓ **Protection:** K13 Galvanic Isolation Transformer at output
- ✓ **Scope:** ATC Tower, RADAR, Approach Control Equipments and Centralised Monitoring System

TECHNICAL INVENTORY

Equipment	Quantity
BPE Modular UPS 100kVA +1	4
BPE Modular UPS 30kVA +1	2
Isolation Transformers (Various Capacities)	11
Static Transfer Switch (STS) 32A	10
i-Smart PDU 32A	20
BMS Battery Nodes	460
Power Cables Laying	~2500m
Network & Comm. Cables	~2400m

CENTRALIZED MONITORING & BATTERY MANAGEMENT

Monitors parameters from each room, distribution points (STS, isolation transformers, panels) at a centralized location, including battery monitoring and parameter display. Approximately 2500 meters of power cables and 2400 meters of network/communication cables were laid, along with installation of 20 metered PDUs, 10 Static Transfer Switches (STS), and 32 Surge Protection Devices (SPDs).

CMS Nodes: 150+

Power Is 

BPE
Strategic Power Solutions