



Newmar

Bulk Feed Distribution System

The TDU/BDU Bulk Feed Distribution System solves the challenge of efficiently distributing DC power on telecom towers for **Mission-Critical Telecom** and power systems, with smart remote management, modular protection and industry-leading surge suppression that enhances overall system reliability.

The Problem:

Voltage Drops and Additional Complexity Up the Tower

- As DC power is transmitted up a telecom tower, voltage loss increases, reducing performance at the top where antennas and RRUs operate
- Conventional solutions use DC trunk cables and boosters, but:
 - Significant voltage drops still occur, especially on long cable runs
 - Boosters add complexity, installation, and material cost, and create more points of potential failure
 - Maintaining spares and providing support requires additional resources
 - Many tower sites are remote or difficult to access
 - Fixed system architectures limit scalability and future expansion

A Newmar Approach:

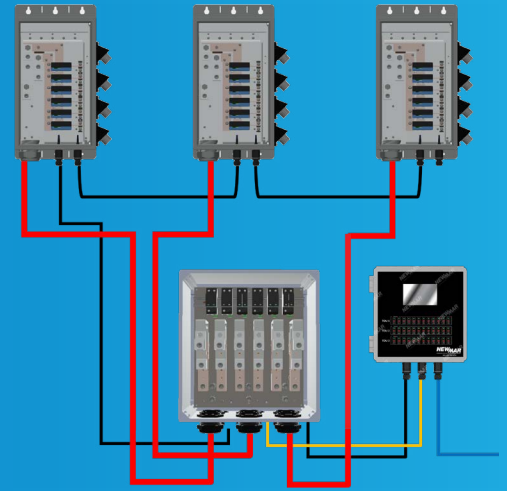
The Newmar Bulk Feed Tower Distribution System safely and efficiently distributes DC power up a telecom tower and minimizes the voltage drop to only 2.5V across an average 60-meter cable run. This provides an end-to-end bulk-feed tower distribution system that ensures steady and reliable power for all RRUs and equipment at the top of the tower, with smart remote management, modular protection, and industry-leading surge suppression all in a rugged, fully certified enclosure.

Key Features of the Newmark Bulk Feed Tower Distribution System:

- Reduced Complexity. No Need for DC Boosters
- Results in Decreased Installation Costs
- Decreased Material Costs
- Minimizes Points of Failure
- Reduces Spares and Support Requirements
- Allows for Expandability
- Weighs Less
- Allows for Remote Monitoring & Control
- Programmability of the ControlGates

The Newmar Bulk Feed Tower Distribution System Consists of Three Parts:

- TDU (Tower Distribution Unit)
- BDU (Base Distribution Unit)
- BDU Controller



TDU Enclosure:

Each TDU Enclosure contains:

- 12x Programmable positions per TDU Enclosure
 - Programmable Current Values from 1A to 63A in 100mA increments
 - Remote Control Power Cycle Operation
 - Programmable Power on Delay
 - Voltage and Current Measurement
 - Individually Replaceable
 - Connections for up to 3 BDUs

Contained in a compact, 20" x 12" x 10" (H x W x D), IP66 steel enclosure with high current capacity circular reverse bayonet style receptacles for connecting equipment

BDU Enclosure:

Each BDU Enclosure contains:

- Power Cable Connections
 - 6x 250MCM cables, (3x input, 3x, output)
- Surge Protection
- MODBUS Connection between TDU and BDU Controller

BDU Controller

- Local Control of the ControlGates for Each Connected TDU
- Integrated Display with Local Controls
- 36 Switches with LED Status Indicators
- Display Monitored Voltage and Current of Each Channel
- Power Connection from BDU

Remote Monitoring & Control via Embedded Webserver:

- Controls Three Tower Distribution Units via the Base Distribution Unit & BDU Controller
- 12 - Programmable ControlGates per TDU With Remote Control for Current Values Up to 60A Per Channel
- Independent On/Off Control and Remote Reset
- User Adjustable Over & Under Voltage Protection and Trip Curve
- Programmable Restart Delay to Protect Against In-Rush Current Failures
- Remote Monitoring of Voltage, Current, and System Temperature
- SNMP v2 and v3 & email Notifications via SMTP

Phone

1.800.854.3906

Email

salesPTN@newmarpower.com

Website

www.poweringthenetwork.com

© Newmar Power Supplies. The information contained herein is subject to change without notice. Newmar shall not be liable for technical or editorial errors or omissions contained herein. All rights reserved.



SOFTWARE

REMOTE MONITORING & CONTROL SOFTWARE:

- Controls Three Tower Distribution Units via the Base Distribution Unit & BDU Controller
- 12 - Programmable ControlGates per TDU With Remote Control for Current Values Up to 60A Per Channel
- Independent On/Off Control and Remote Reset
- User Adjustable Over & Under Voltage Protection and Trip Curve
- Programmable Restart Delay to Protect Against In-Rush Current Failures
- Remote Monitoring of Voltage, Current, and System Temperature
- SNMP v2 and v3 & email Notifications via SMTP



Phone
1.800.854.3906

Email
salesPTN@newmarpower.com

Website
www.poweringthenetwork.com

© Newmar Power Supplies. The information contained herein is subject to change without notice. Newmar shall not be liable for technical or editorial errors or omissions contained herein. All rights reserved.