COMMSCOPE®

Take back the power with PowerShift®

The industry's first intelligent, plug-and-play dc power supply

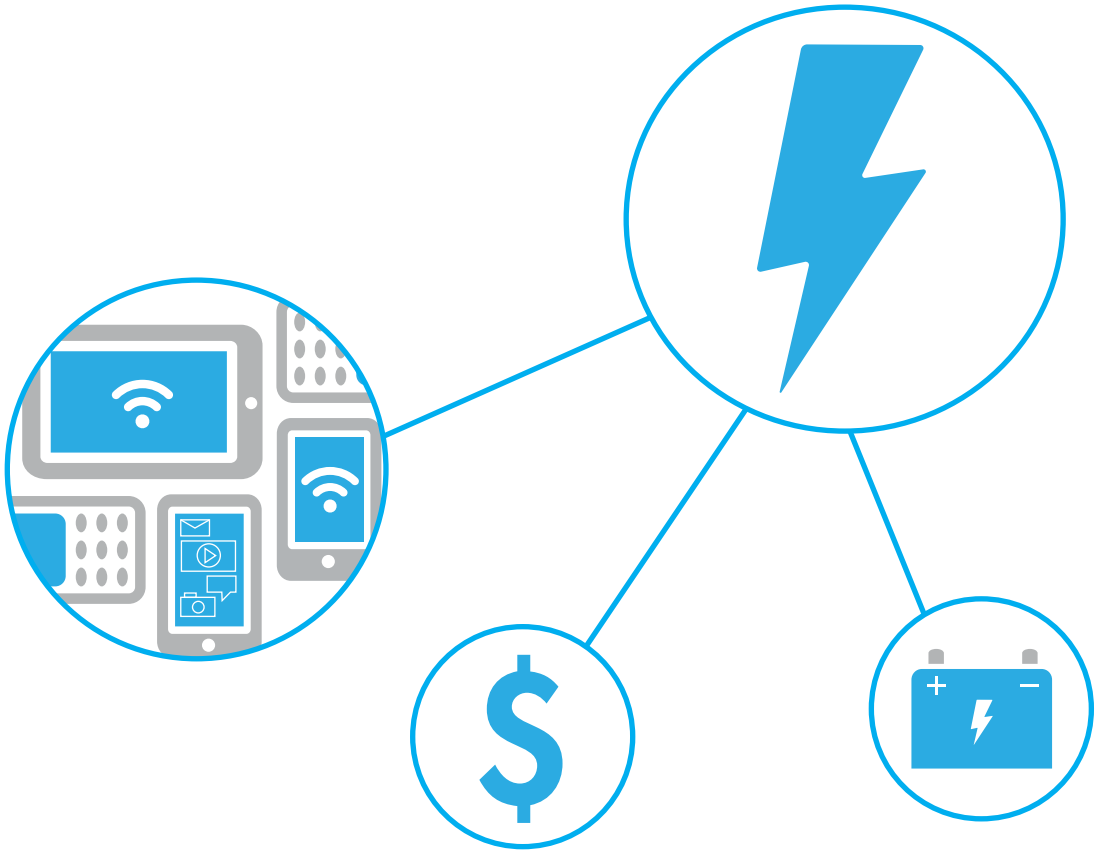
- Reduce CapEx and OpEx
- Extend RF battery uptime by up to 35%
- Build future-ready infrastructure to accept higher-powered radios

The wireless industry is ready for a PowerShift®

LTE technology has dramatically improved coverage and capacity for subscribers—but it comes at a cost.

Today's high-performance remote radio units (RRUs) consume more power, and operators are installing more of them to keep up with exploding data traffic. Radio equipment is also increasingly moving to the top of the tower, requiring more energy to deliver the right power level to the units.

And it's not just operators' energy bills that are skyrocketing. To handle the increased power requirements, higher-wattage RRUs require additional power cables or larger power conductors, which use more copper. The increase in copper adds more weight on the tower—as do the thicker, more expensive cables required to support these new RRUs. Add in higher installation costs and rising copper prices, and operators are feeling the financial squeeze of upgrading to LTE.



Tilt the equation back in your favor.

The wireless experts at CommScope and power experts at GE have partnered to create PowerShift®, the industry's first intelligent, plug-and-play dc power supply. PowerShift is designed to optimize electrical draw by adjusting voltage dynamically to match your exact RRU power requirements—without the need to add a tower-top converter.

Tired of losing the power battle?
It's time for a PowerShift.

COMMSCOPE® + GE®

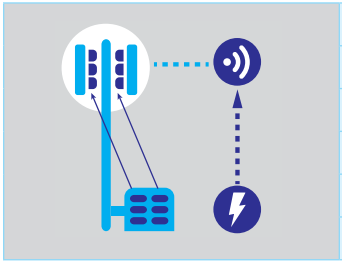
Costs go down, ROI goes up

Whether you're upgrading RRUs or deploying small cells, here's how incorporating PowerShift can benefit your bottom line:

RRU upgrade*

If you need to upgrade from a 400 Watt RRU to a 900 Watt RRU, your existing cabling system will prove insufficient because the voltage drop is too high. Without PowerShift, you are then forced to replace those power cables with a larger conductor. PowerShift enables you to keep your existing cable while significantly reducing installation time and expenses.

- Speeds installations
- Increases RRU uptime with battery backup



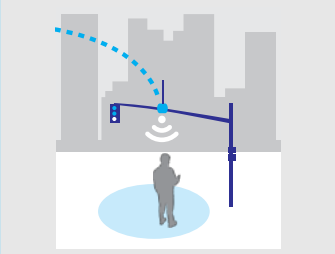
	Before PowerShift	After PowerShift
Est. materials cost per RRU	$541	$250
Est. materials cost per site	$4,870	$2,250
Labor ($65/hour)	$1,300	$130
Manhours	20	2
Cost per site	$6,170	$2,380
Cost per 1,000 sites	$6,170,000	$2,380,000

PowerShift cost savings $ **~$3.8M (per 1,000 sites/9 RRUs)**

* These calculations are provided as an example and may vary depending on specific site configurations.

New metro cell deployment*

Route smaller cable, future-ready for higher wattage radios

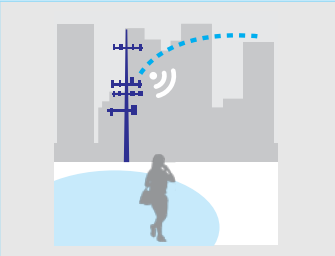


	Before PowerShift	After PowerShift
RRU input wattage	150 Watts	150 Watts
Conductor size	8 AWG	14 AWG
Cable length	1200 Feet	1200 Feet
CaPex savings per RRU		$965.84
OpEx increase per RRU/year		$25.92

PowerShift CaPex savings $ **~$1M**
(per 1,000 sites/1 RRU)

New macro site installation*

Allows standard solution, less tower load and is future-ready for higher wattage radios



	Before PowerShift	After PowerShift
RRU input wattage	400 Watts	400 Watts
Conductor size	6 AWG	10 AWG
Cable length	240 Feet	240 Feet
CapEx savings per RRU		$61.11
Increase per RRU/year		$11.21

PowerShift CaPex savings $ **~$600K**
(per 1,000 sites/9 RRUs)

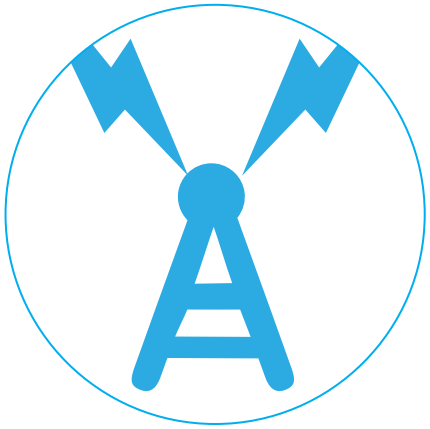
Power up your tower

Upgrading to LTE is an increasingly expensive proposition, but it doesn't have to be. PowerShift gives you back the balance of power by delivering the most efficient voltage to your RRUs in real time automatically—regardless of power supply, distance, conductor size or RRU power requirements. That optimization enables you to decrease the cost of network rollouts and upgrades, and start earning a greater return on investment from day one. PowerShift also offers the system design flexibility you need to create an agile, future-ready network.

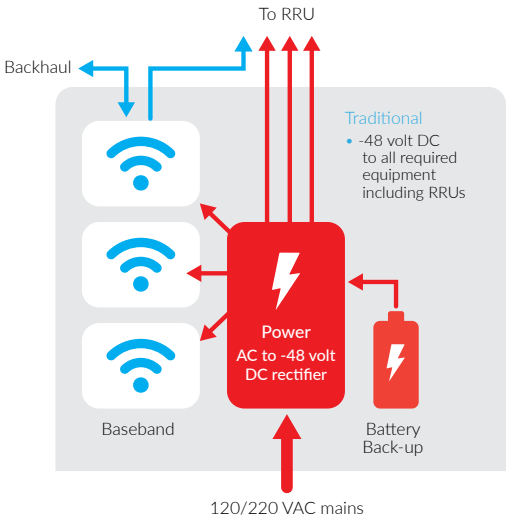
CommScope is dedicated to supporting wireless operators around the globe through solutions that enhance the capacity and coverage of their networks while reducing total cost of ownership. Take back the power with PowerShift. Contact your local CommScope representative today to learn more.

PowerShift—results to customers

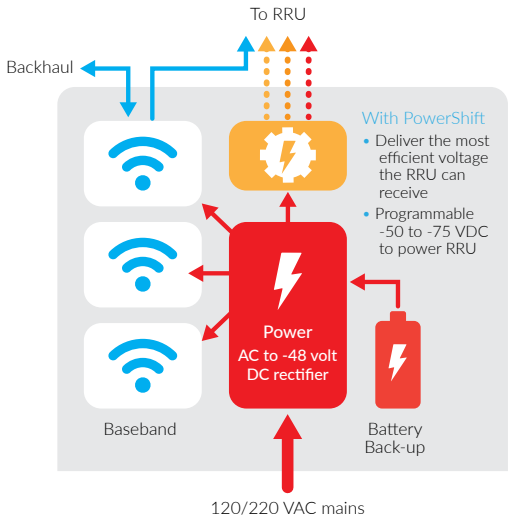
- Reduces capital and/or operating expenses
- Increases RRU uptime with battery backup
- Provides engineering flexibility in system design
- Plug and play, with no manual calibration required
- Expands allowable cable lengths
- Reduces space and weight load issues
- Decreases tower leasing costs
- Effectively eliminates di/dt inductive loss concerns
- Easy to install or retrofit



Traditional Setup



Setup with PowerShift



From top to bottom, CommScope has you covered.

Since PowerShift® is an important part of CommScope's world-renowned product portfolio, you can be confident that you're benefiting from some of the finest wireless infrastructure and expertise:

- Enhanced performance and compatibility: Custom-designed HELIAX® FiberFeed® cable solutions configured to fit your specific RRU upgrade scenario, made-to-order cabinet options and preconfigured power selections that enable operators to select their preferred power configurations and operator-specified OEM electronics
- Comprehensive supply-chain logistics: 24 locations in 14 countries, crossing six continents
- Wireless services and solutions: Installation training support, including project management, deployment and kitting best practices

Visit www.commscope.com for more information on Power Solutions.

Everyone communicates. It's the essence of the human experience. *How* we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers—we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.

COMMSCOPE®

commscope.com

Visit our website or contact your local CommScope representative for more information.

BR-109481.1-EN (03/17)