



# i-POI® intelligent point of interface The smart, streamlined base station interface solution for distributed antenna systems.

### Big performance. Small footprint.

# Take control over BTS conditioning and PIM with the space-saving CommScope Intelligent Point of Interface

The demand for wireless connectivity is more intense than ever. Customers today expect coverage everywhere, at any time—even deep inside buildings or in stadiums packed with thousands of other wireless users.

That surge in demand for indoor wireless coverage has presented distributed antenna system (DAS) engineers with some daunting challenges:

- How can you build a reliable, universally compatible DAS that delivers adequate coverage and capacity for all carriers, while fitting the necessary base station transceiver (BTS) interface components within tight space restrictions?
- How can you accommodate multiple BTS interfaces while maintaining consistent power levels, and without causing issues with passive intermodulation (PIM)?
- How can you balance signals from multiple operators using different technologies, ensuring that power is properly allocated between them all?
- And, of course, how can you do it all while keeping commissioning and maintenance costs low?

### Intelligence is the answer.

Typical BTS-to-DAS interface solutions consist of a patchwork of multiple discrete components. This requires a great deal of installation space as well as extensive cabling. It can also result in PIM issues, because the components are usually sourced from multiple vendors, and therefore not always designed to work together.

Such solutions also offer no simple way to monitor and correct BTS conditioning. This complicates troubleshooting, making it harder to identify and resolve small issues before they become big, expensive repairs.

The answer to these challenges is clear. It's time for an intelligent interface solution that provides BTS conditioning visibility, reduces PIM, and integrates multiple functions into a single, space-saving module that's simple to install and cost-effective to maintain.

### It's time for the CommScope i-POI

The CommScope Intelligent Point of Interface (i-POI) is an integrated BTS interface solution that takes the guesswork and expense out of BTS commissioning and maintenance. Whether you're building a new DAS or upgrading an existing system, The CommScope i-POI is powerful and flexible enough to be the foundation of your network.

By combining BTS conditioning, signal combining, splitting, monitoring and various test options in a single, intelligent module, the i-POI lets you monitor and control BTS conditioning both on-site and remotely—a feature no other solution offers. Its unique design also enhances signal quality, minimizes PIM and simplifies commissioning and maintenance, with a footprint that's up to 25 percent smaller than typical BTS interface implementations.

Compatible with multiple wireless technologies, including GSM, CDMA, UMTS and LTE, the CommScope i-POI was developed in conjunction with major wireless operators around the world, specifically to solve the challenges facing DAS engineers and operators. It has universal application with all DAS systems, and it works particularly well with CommScope ION®-M and ION-B systems.



Over 75 percent of wireless phone calls originate or terminate indoors

### Intelligent. Reliable. Integrated.

# Three key reasons the i-POI is the right BTS interface for your distributed antenna system.

Until now, no BTS connectivity solution could address the competing challenges facing DAS engineers and operators. That's what makes the i-POI revolutionary: it's the only integrated BTS interface solution that combines intelligent performance monitoring, remote control and exceptional PIM performance, all within a dramatically reduced footprint.

### The only intelligent BTS interface on the market.

The i-POI boasts a long list of intelligent features that simplify maintenance and troubleshooting, helping you identify and solve problems faster. That reduces repair and maintenance costs, and ensures a consistently high quality of service.

The module's high-contrast OLED display gives you convenient, password-protected access to module settings and performance information. Its included signal generator can be tuned to any frequency from 138–4,400 MHz, simplifying system leveling, commissioning and field strength testing. And built-in RSSI detectors measure the input and output power of the uplink and downlink signals. If there is a problem, a red LED indicator lets you know.

Another powerful feature the i-POI offers is remote control. Many of its functions, including uplink and downlink power measuring and leveling, automatic leveling control, and troubleshooting using the test-tone generator can be accessed remotely through AIMOS or SMNP traps when the subrack controller option is implemented. That means most problems can be diagnosed and fixed remotely, reducing the need for costly field service.





## CommScope p-POI: the affordable option

Our passive point of interface delivers the same high performance and small footprint as the i-POI at a lower price point.

## Engineered for high performance and low PIM.

The i-POI uses DIN connectors rated for high power, and it features a unique linear design. The combination results in PIM values better than -155 dBc. This not only ensures more reliable performance, it also reduces installation and maintenance costs, because the need to configure multiple different components is eliminated.

## Integrated design reduces space requirements up to 75 percent.

The i-POI replaces cumbersome, multi-component interfaces with a single, sleek module that's much smaller than other interface solutions. In fact, you can fit up to eight i-POI modules in a single subrack.

The results can be dramatic: the i-POI can reduce rack space requirements up to 75 percent, making it the perfect choice for venues that restrict wireless infrastructure space.

With its small footprint, the CommScope i-POI gives you more room to fit other essential components. And its plug-and-play functionality makes it simple to install new modules, with no need for splitters, couplers or terminators.

#### Amazing things come in small packages.

If your venue demands top-of-the-line network performance, but your budget demands bottom-line value, look no further than the CommScope i-POI. It offers a combination of intelligence, simplicity and compact size that no other interface can match, delivering reliable, high quality of service while reducing maintenance costs.

With the i-POI on the job, the days of frustrating and costly BTS conditioning and PIM issues are over. It's the only BTS interface that puts you in total control.

# ION and i-POI: better together

Pair the i-POI with a CommScope ION-B or ION-M system to enable additional features that improve system performance and enhance monitoring and troubleshooting.

When part of an intelligent ION solution, the i-POI supports automatic system leveling. It can also inject ID protocols into the signal going to and from the DAS, so each BTS signal can be traced through the DAS down to the antenna port.

### The Intelligent Choice

## CommScope is the trusted leader in DAS design and implementation.

CommScope sets the worldwide industry standard in DAS technology—literally. Many of the custom solutions we've developed for our customers have gone on to become the standard industry spec.

With a 75-year record of innovation, and more DAS deployments around the world than any other provider, CommScope has the expertise, the resources, and the global supply chain to deliver the right DAS solution for virtually any venue, anywhere on Earth.

Our DAS solutions have been chosen for dozens of challenging, high-profile projects around the world, from the 2010 World Cup Stadium in South Africa to Burj Khalifa, the world's tallest building in Dubai, to the World's Most Famous Arena, Madison Square Garden in New York. Our solutions perform flawlessly and reliably in some of the world's most demanding environments — a key reason why CommScope is the first choice when network performance is a priority.

#### We're invested in the future of wireless.

With technology rapidly advancing, it's more critical than ever to anticipate what's next. That's where CommScope's deep expertise works for you. We engineer our products with an eye toward the future, so you can be sure your network will work reliably today, and tomorrow.

We're always two steps ahead – and that helps keep your network ahead of the curve. Our "future proof" approach contributes to a lower total cost of ownership for your network, because our solutions won't become obsolete before their time.

### One trusted resource for all your needs.

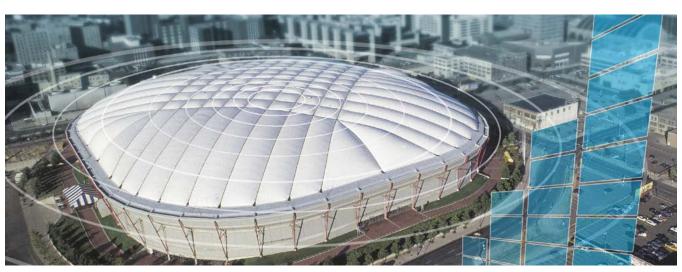
Our engineering and design expertise lets us deliver a solution that meets your network's unique requirements. We manage and support through every phase of design and implementation, including full project management and general contracting services.

In addition to our extensive in-house capabilities,
CommScope offers various services through our
CommScope BusinessPartners. For many of our customers,
BusinessPartners are critical problem-solvers who leverage
CommScope technology to deliver real-world solutions that
make a difference in your business. We're so confident that we
can deliver those solutions that we offer a warranty on all of
our work. To learn more about CommScope BusinessPartners,
please visit www.commscope.com.

### Let our unmatched expertise improve the performance of your DAS.

Take control of PIM and improve system performance with the next generation of intelligent BTS interface technology: the CommScope i-POI.

Contact CommScope today for an expert consultation about integrating the CommScope i-POI into your venue's DAS. Visit <a href="https://www.commscope.com">www.commscope.com</a>.



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.



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