

# InterReach Fusion®



Fusion offers all the benefits of Unison in a multi-band solution, enabling any organization to implement state-of-the-art in-building wireless for campus environments and for areas greater than 250,000 square feet (23,000 square meters). Highly economical and remarkably easy to maintain, Fusion delivers unparalleled high performance that competitive products simply cannot match. There are even integrated Web-based administrative and maintenance tools.

Fusion's advanced configuration options are ideal for wireless operators who deploy multiband spectrum in-building solutions as well as for multi-operator installations such as public venues (hotels, retail shops, subway stations) and enterprises.

## PRODUCT HIGHLIGHTS

### InterReach Fusion Features:

- Delivers wireless voice and high speed data
- True multi-band system using a single set of electronics/cabling
- Supports frequencies from 800 MHz to 2.5 GHz
- Dedicated capacity per band, easily supports dense user environments
- Distributed amplifier system, ensuring best-in-class performance and uniform output power at every antenna point
- High output power, provides greater coverage area per antenna
- Zero loss system, making design simple and guaranteeing consistent coverage from every antenna
- Economical installation thanks to use of CATV cabling
- Double star architecture makes installation and future expansion quick and nondisruptive for campuses or large venues
- Best-in-class integrated Web-based administrative and maintenance tools
- Individual band shutdown or lockout provides flexible RF performance adjustments via administrative tools
- Integrated SNMP capability allows use of standard network management packages
- FCC, UL and CE Mark approved



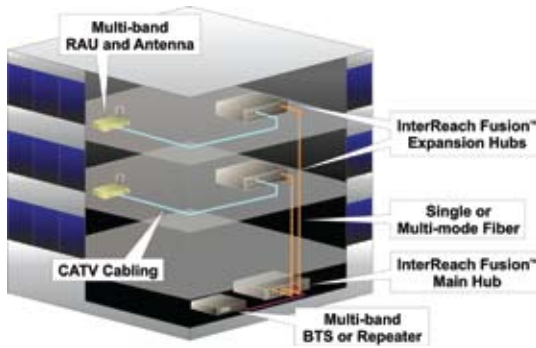


# InterReach Fusion®

## Components

InterReach Fusion features an easy-to-deploy double star architecture of one main hub and up to four expansion hubs connected via fiber (MMF or SMF). Each expansion hub then connects via CATV cabling to up to eight Remote Access Units (RAUs). The main hub receives its radio frequency (RF) signal from a base station, a MetroReach Focus system, or a repeater. The main hub converts the RF signal to optical, and the signal is sent to the expansion hub using fiber. The expansion hub then converts the optical signal to electrical, and distributes the signal to the RAUs via CATV (thin Ethernet) cabling. Each RAU sends - and receives - the signals via passive antennas connected to the RAU to wireless phones and PDAs located within its coverage area.

The Fusion hubs are packaged in a 19" rack-mountable unit. The small RAUs, and the antennas connected to them, are typically mounted in ceiling spaces throughout the facility. The CATV cabling between the hub and each of the eight RAUs can be up to 300 meters (1000 feet) long depending on the cable type used. RG59, RG6, and RG11 cable types can all be used with the system, and can be "mixed and matched" on a single hub.



## Protocols

Fusion was designed with a variety of multi-frequency (from 800 MHz to 2.5 GHz), fullband, protocol-independent configuration options to support any environment, anywhere. And unlike competing solutions, Fusion offers dedicated capacity per band. Other solutions provide a fixed amount of capacity shared across bands, forcing unwelcome trade-offs when adding capacity to a specific band.

Fusion's advanced configuration options are ideal for wireless operators who deploy multiband spectrum in-building solutions as well as for multi-operator installations such as public venues (airports, resorts/hotels, shopping malls, sports venues, convention centers), enterprises, and multi-building campus environments.

4/08 • 106020AE InterReach Fusion®



# InterReach Fusion®

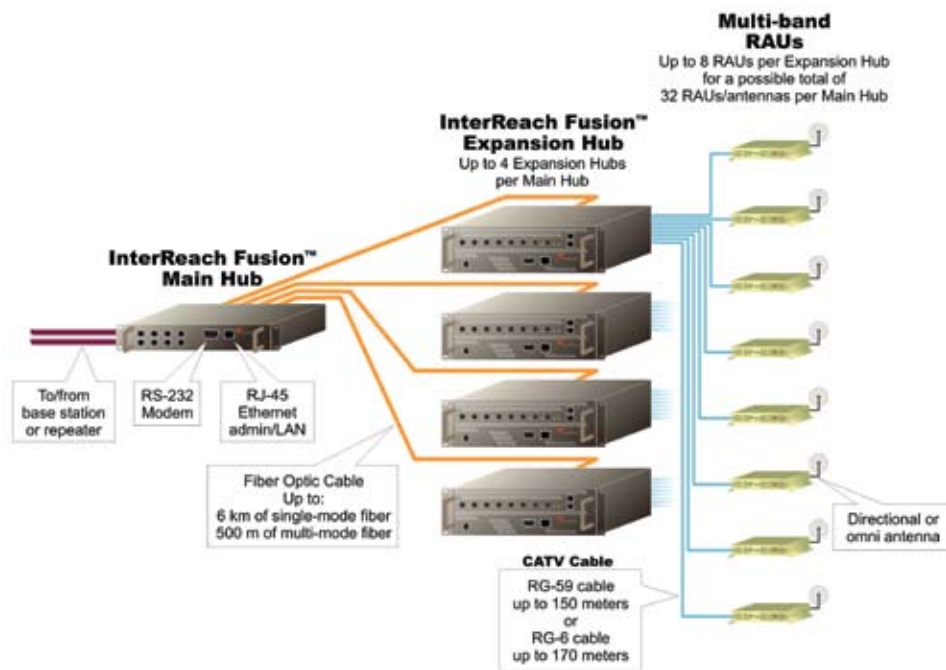
## Ease of Installation

Fusion leads the industry in ROI by requiring less equipment and less cabling, and that translates into low installation costs, resulting in the lowest total solution cost. Cost efficient broadband CATV cabling is utilized between the hub and the remote access unit. The inexpensive CATV cabling used is less than a 1/4" in diameter, flexible, quick to install, easy to connectorize, and can span from 150 to 300 meters depending on the type deployed. And different CATV cable types can be "mixed and matched" on each expansion hub port to easily accommodate varying cable run length requirements. Plus, it doesn't require specialized installers, another great savings.

In addition, InterReach Fusion offers the choice of using single or multi-mode fiber. Many enterprises have "spare" multi-mode readily available as a result of conversion to single-mode fiber, further reducing cost and time of installation. The system's double star architecture not only makes installation easy, it also makes accommodating future growth a snap. In most instances, there's no need to add lots of additional equipment and cabling to expand system coverage – it's as easy as simply adding another CATV cable and antenna point on the system.

Unlike some other systems, neither adding coverage to additional buildings nor adding capacity requires system rebalancing or more equipment thanks to Fusion's high composite power and dedicated capacity per band. And this simplicity holds true for adding support for additional wireless operators or newly acquired spectrum as well.

4 / 0 8 • 1 0 6 0 2 0 A E InterReach Fusion®



## Management Tools

ADC understands that after the installation, sophisticated systems management is critical for providing continuous wireless service and maximum “up-time”. To meet these requirements, ADC provides a comprehensive and flexible set of system management solutions and services.

With InterReach Fusion products, day-to-day operations are simple, straightforward, and cost effective thanks to a Web-based configuration and maintenance capability. No proprietary software is needed, as any standard Internet browser can access the integrated Web server, and that makes local and/or remote routine maintenance and troubleshooting a seamless undertaking. Also, the resident SNMP capability supports connectivity to any standard network management package, so customers can easily integrate Fusion management into their existing network operations.

ADC’s InterReach Fusion in-building wireless systems continuously monitor over 60 parameters including both system components and cable infrastructure. Should a fault condition develop, InterReach Fusion proactively sends notification via one of several methods:

- Alarm contacts connected to a base station that is monitored by the wireless operators’ network management system
- SNMP traps to an SNMP Network Management System (NMS) via Ethernet LAN or modem outcalling

Monitoring adds value in that it regularly confirms that the connections to the InterReach Fusion system are operational and available and that there are no issues with the systems. Remote monitoring can be done by the wireless operator, the enterprise, or ADC’s Network Operations Center.



**Website: [www.adc.com](http://www.adc.com)**

From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080  
 Fax: +1-952-917-3237 • For a listing of ADC’s global sales office locations, please refer to our website.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101  
 Specifications published here are current as of the date of publication of this document. Because we are continuously improving our products, ADC reserves the right to change specifications without prior notice. At any time, you may verify product specifications by contacting our headquarters office in Minneapolis. ADC Telecommunications, Inc. views its patent portfolio as an important corporate asset and vigorously enforces its patents. Products or features contained herein may be covered by one or more U.S. or foreign patents. An Equal Opportunity Employer