

# Integris™ 3000

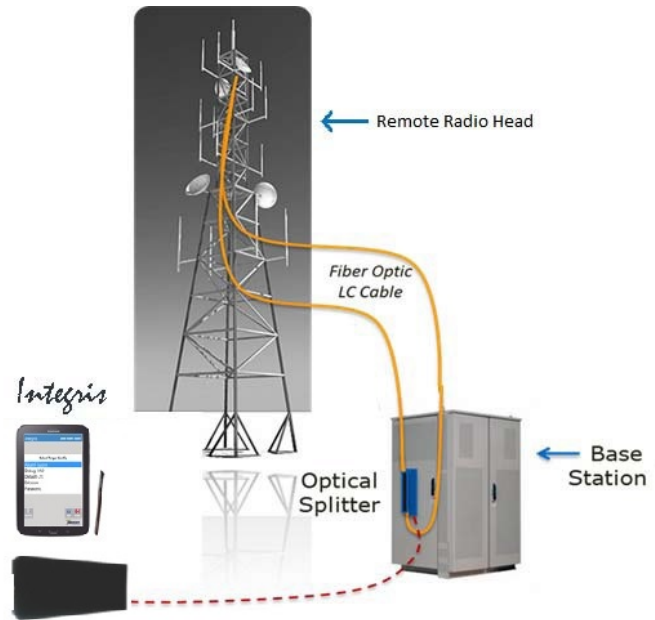
## RF Interference Measurements Using CPRI

Real-time RF Extraction and Output from a CPRI Link

### Overview

Most modern cell tower network configurations place the remote radio head (RRH) at the top of the tower and the baseband unit (BBU) at the bottom of the tower. While this configuration is advantageous for both computational efficiency and mitigation of RF loss across the cable, it means the only place analog RF can be accessed is at the top of the tower. This forces field technicians to have to climb the tower to measure and debug RF noise problems.

Integris eliminates the tower climb by accessing the RF through the digital link available at the bottom of the tower. This digital link uses the CPRI protocol to carry the RF data in digital IQ form to the bottom of the tower. By accessing the data here, not only are the costs for truck rolls and tower climbs reduced, but time to resolution is also accelerated due to the ability to use software analysis and collaboration tools to analyze the noise signatures.

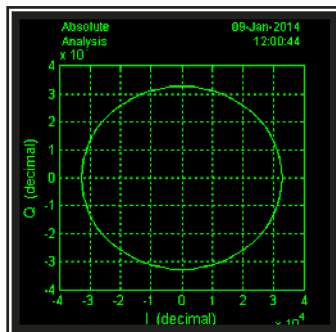


### Test Applications

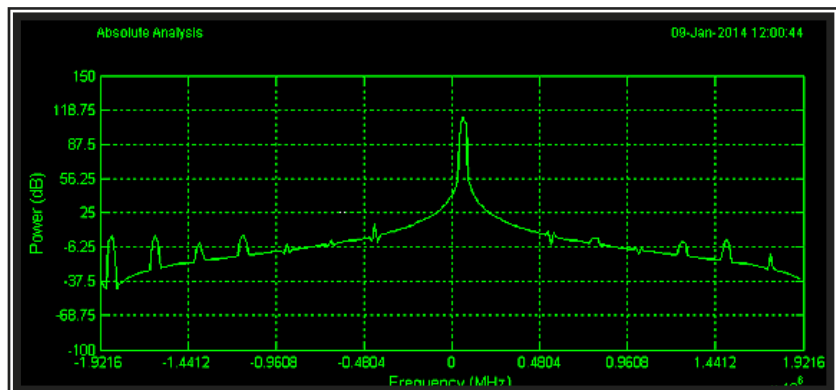
- Measurement of RF signals at the base of cell towers utilizing the CPRI or OBSAI link for noise and interference debugging
- No tower climb necessary to access RF signal
- Full RF spectrum analysis via software analysis tools
- Capture noise profiles needed for drive test analysis
- Remote control and collaborate over the Internet

### Key Benefits/Features

- Lowers noise troubleshooting costs by reducing truck rolls and tower climbs since RF signal is accessed at the bottom of the tower via the CPRI link
- Speeds time to problem resolution by using signal analysis software to isolate problems quickly
- Real-time calculation of Error Vector Magnitude (EVM), Signal to Noise Ratio (SNR) and display of Power Spectrum
- Digital RF capture provides unparalleled accuracy and offline processing capabilities



Integris 3000 Display of  
Constellation & RF Power



## *Integris 3000*: RF Interference Measurements

### Summary of Features and Specifications

<i>Application</i>	Designed for senior cell site technicians and RF engineers.  Measurements are taken utilizing digital RF available on the CPRI link that connects the Remote Radio Head (RRH) to the Baseband Unit (BBU)  Capture data for offline processing
<i>Test functions</i>	Measures RF, captures RF, displays power spectrum, constellation waveforms, outputs IQ for offline processing and analysis, export to IQ analysis software
<i>Interface support</i>	Optical SFPs support. Connection to the link is normally done via optical splitter
<i>Protocol Support</i>	CRPI 1.2288, 2.4576, 3.072, 4.9152 and 6.144Gbps (up to version 5.0 of the CPRI specification)
<i>Chassis and I/O Interfaces</i>	Black Chassis + 8" Tablet 2x USB 2.0, 1x Ethernet + 1 VGA
<i>Optional Components</i>	RF Output Port
<i>Power Supply</i>	Input 100-240V, 50-60 Hz
<i>Size and Weight</i>	14.5" x 6.5" x 5"  5 lbs.
<i>Environmental Specifications</i>	Operating Temperature -20 to + 50 C  Humidity (non-condensing) 95%
<i>Ordering Information</i>	Integris 3000 Interference Package  With or without RF Output port

Information included in this overview is subject to change without notice.  
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### Training

Absolute Analysis offers comprehensive training courses for products and protocols. Training can be provided at your location or remotely, and can be customized to your requirements.

### Service and Support

Absolute Analysis provides unsurpassed service to all Integris users including remote diagnostics, extended warranties, and upgrade paths to current offerings from any Integris™ system.

### For More Information

#### Phone

+1 805.376.6048

#### Fax

+1 805.376.6041

#### Email

sales@AbsoluteAnalysis.com

#### Web

www.AbsoluteAnalysis.com

#### Address

2393 Teller Road, Suite 109  
Newbury Park  
CA 91320, USA