

Kaelus iVA



Kaelus is the market leader in providing simple to operate bench-top PIM test equipment for the factory environment. This equipment has enabled RF equipment manufacturers around the world to quickly and efficiently test their products to ensure low PIM performance.

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Recently, Kaelus introduced rugged, portable versions of its PIM test equipment to enable Passive Intermodulation testing to be conducted at the cell site. This new test capability allows network operators to find and resolve construction quality issues that are not visible using standard return loss or "sweep tests." Cleaning sites to remove PIM sources reduces system noise and improves cell site performance.

The iVA Series Cable & Antenna Analyzer is an exciting new product from Kaelus that enables users to accurately measure VSWR/return loss and the location of the VSWR/Return Loss faults in their RF infrastructure. The wireless connectivity allows unprecedented measurement flexibility and opens up new & important possibilities in Sweep testing and multi-port testing. The iVA is a rugged battery operated module that can be remotely controlled with any Bluetooth enabled tablet, smart phone, laptop computer or any of our iPA Series Portable Passive Intermodulation analyzers.

Effective PIM and Sweep testing requires knowledge, practical skills and appropriate tools. Kaelus offers a variety of training options to teach engineers, technicians and installation crews the skills needed to construct, characterize and maintain RF infrastructure quality, by measuring Return Loss, VSWR, Cable Loss, Passive Intermodulation, and Distance-to-Fault.

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## Who Should Attend Kaelus PIM Test Equipment Training?

Kaelus now offers "location based" and "on-site" training. These training courses provide the skills needed to construct and maintain a "low PIM", "High RL" RF infrastructure.

Training & Certification	Advanced PIM Training	Advanced PIM & Sweep Training
Who Should Attend	<ul> <li>RF Design Engineers</li> <li>RF Optimization Engineers</li> <li>Site Maintenance Technicians</li> <li>Installation Project Leaders</li> <li>Installation Technicians</li> <li>PIM Test Technicians</li> </ul>	<ul> <li>RF Design Engineers</li> <li>RF Optimization Engineers</li> <li>Site Maintenance Technicians</li> <li>Installation Project Leaders</li> <li>Installation Technicians</li> <li>PIM &amp; Sweep Test Technicians</li> </ul>
Approximate Time to Complete	6 Hours	9 Hours
Number of Students per Class	Min 8 – Max 12	Min 8 – Max 12

## PIM Testing vs. PIM / Sweep Testing Course Comparison

Training & Certification	Advanced PIM Training	Advanced PIM & Sweep Training
Passive Intermodulation Fundamentals     PIM Sources at a Cell Site     PIM Testing vs. RI Testing     Test Power Level and Frequencies	<b>⊘</b>	<b>⊘</b>
Sweep Test Fundamentals		<b>⊘</b>
Test Equipment Overview     Safety Precautions     Making a Measurement     Recording Results	$\odot$	$\odot$
Test Methodology	$\odot$	$\odot$
Practical Exam - Student Must Demonstrate to Instructor Proper Equipment Set-Up Proper Testing Technique Ability to Create Reports	$\odot$	$\odot$
Written Exam - Verifies Student Understands Course Material	<b>⊘</b>	<b>⊘</b>

Training provides students hands on practice time to further demonstrate the new skills they have learned under the supervision of a Kaelus instructor.

## **Training Course Logistics**

Training courses can be conducted on-site, or at a Kaelus regional training center, depending on which training option is selected.

Logistics	PIM	Sweep
Course Materials and Logistics	Trainer will Provide     One (1) 20W PIM Test Set (iPA or iQA)     One (1) Accessory Kit Customer to Provide     Two (2) 20W PIM Test Sets (if available)     Meeting Room     Projector     Screen or White Wall	Trainer will Provide     One (1) iVA Test Set     One (1) Accessory Kit Customer to Provide     Two (2) iVA Test Sets (if available)     Meeting Room     Projector     Screen or White Wall
Upon Course Completion, Student Receive	Certificate of Training, Wallet Certification Card	Certificate of Training, Wallet Certification Card

To schedule a training course, obtain pricing, or for more information email us at training@kaelus.com.