

The smarter way to test

Quickly mitigate PIM and RF interference for faster time to revenue

Smarter network in sight.

EXFO

Identifying and mitigating PIM and RF interference issues can be a very expensive, manual and time-consuming process that typically requires multiple tower climbs and/or RF expertise. This is at odds with pressure to quickly troubleshoot cell sites, deliver close-out packages on time and get paid faster.

Easy-to-use tools that deliver accurate results every time—coupled with simplified test and reporting processes—are the solution to manage a high number of towers and get the job done right the first time.

Three main types of interference

Internal PIM	External PIM	External RF interference
Caused by internal RF elements in the radiating infrastructure, such as loose connectors, damaged cables or connectors, or faulty antenna elements	Caused by external objects near the cells, such as (usually rusty) metallic objects close to the antenna	Caused by external objects such as noise from other RF sources. Examples include electric fences, light dimmers and jammers

What to consider when diagnosing RF interference and PIM issues

- Tower climbs don't guarantee issue resolution
- Repeat tower climbs are costly
- Technicians have a short window to troubleshoot and solve the issue
- Difficult and unsafe to carry a bulky, heavy PIM analyzer up the tower
- Using various, complex test tools with different interfaces requires extensive training

Simplify RF interference and PIM mitigation

Save time, close out tickets faster and get paid!



RF analysis over CPRI
Determine if interference issue is internal or external

Internal source:
tower crew required

External source



PIM blanket
Cover suspected source of PIM; identify actual source

Unable to find the source



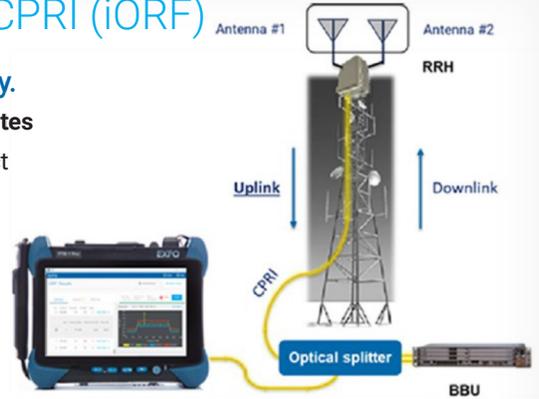
Over-the-air RF spectrum analyzer, interference hunting filter and PIM probe
Locate external interference and PIM sources

PIM and RF interference hunting toolkit

Intelligent optical RF spectrum analysis over CPRI (iORF)

10 times faster than any other RF-over-CPRI solution in the industry.

- Determine whether there's internal or external interference in **less than 5 minutes**
- **Fully automated**, complete analysis of the RF spectrum with a pass/fail verdict
- Easy **one-button** report generation
- **No learning curve**: easy set-up without the need for RF expertise
- **Avoid repeat truck rolls**: determine whether the issue is RF interference, internal PIM or external PIM



+ PIM blankets and absorbers

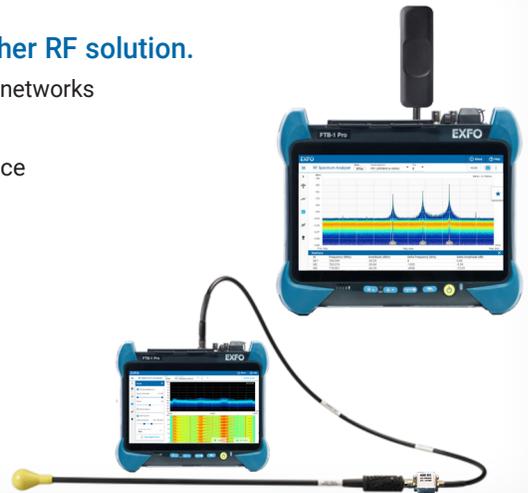
Use ConcealFab's PIM blankets and absorbers as temporary RF barriers to isolate PIM sources. Place the blanket over a suspected source while using iORF to detect the level drop and validate which PIM source is to blame.



5GPro Spectrum Analyzer

Resolve PIM and RF interference issues 2 times faster than any other RF solution.

- Combined with iORF on the **same FTB 5GPro test kit** to validate 4G/LTE and 5G networks
- The **only field-upgradeable, flexible** RF over-the-air spectrum analyzer
- **Quickly and easily** pinpoint and eliminate the source of PIM and RF interference
- **Modular**: sub-6GHz (FR1) and mmWave up to 40GHz (FR2) support
- Audible tone for **safe and effective PIM and interference detection**
- **Optimal user experience**: **easy-to-use and easy-to-interpret** user interface



+ Locate external PIM without a PIM Analyzer

Use interference hunting filters from MWC Microwave and ConcealFab's PIM test probe together with the EXFO's 5GPro Spectrum Analyzer to precisely locate external PIM sources in the field.

Maximize your ROI:

All-in-one, modular FTB 5GPro test kit



- RF spectrum analyzer
- RF spectrum over CPRI
- Timing and synchronization
- Multi-protocol testing
- Transceiver validation
- Fiber characterization
- Fiber inspection
- Transceiver support (up to 100G)

Learn more:



[iORF](#)



[5GPro Spectrum Analyzer](#)



[ConcealFab Absorber Kits](#)

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