

R29-4789

FILTER KIT FOR PIM FINDER SOLUTION

A challenging category of Product of Intermodulation (PIM) to remedy is external PIM. This refers to PIM generated not in the cell site's antenna infrastructure but rather in objects in the surrounding environment, for example, loose mounting brackets, roof flashing and structural steel beams.

Identifying the location of external PIM sources has historically been a complicated problem for mobile operators worldwide. To address this measurement challenge, Kaelus offers the PIM Finder Solution.

The PIM finding process requires two 20W tones to be radiated in order to illuminate the PIM sources. The PIM products generated are then captured by a spectrum monitor. Some filtering must be placed at the input of the spectrum monitor to prevent the two 20W tones from generating PIM internally to the spectrum monitor. The filter KIT offers various filters to cater for the testing performed at different frequencies.



FEATURES

- 4 filters in a hard case
- For use with iPA-0707D, iPA-0850D and iPA-1921A

TECHNICAL SPECIFICATIONS

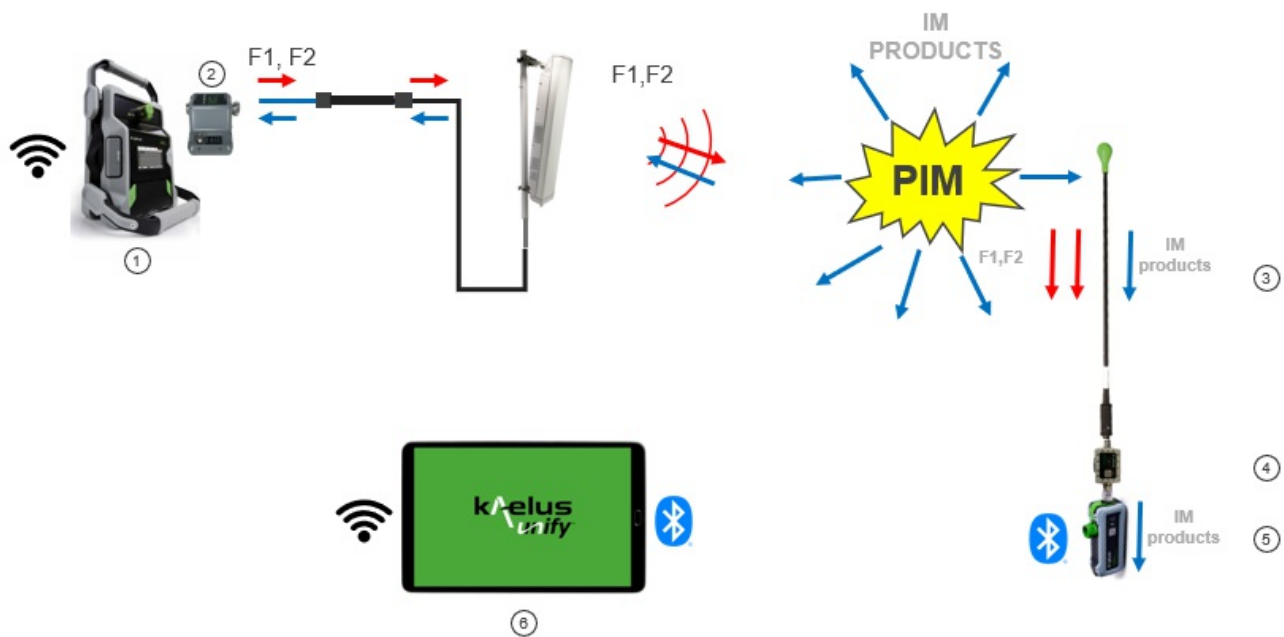
SYSTEM	
Passband	iPA receive frequency bands Refer to ordering information
Insertion loss	3dB typical
Rejection	60dB typical at the iPA transmit frequencies Refer to ordering information
Maximum input power	0.5W maximum

ORDERING INFORMATION

PROTECTION FILTER				
PART NUMBER	DESCRIPTION	PASSBAND FREQUENCY	STOPBAND FREQUENCY	IPA MODEL
R29-4792	Band 13 - 700 MHz Uplink Filter	776-787MHz	728-764MHz	iPA-0707D iXA-0707A
R29-4794	Band 5 - 850 MHz Low band Uplink Filter	824-849MHz	869-894MHz	iPA-0850A
OEM124365	Band 3 - 1750 MHz Uplink Filter	1710-1785MHz	1805-1880MHz	iPA-1800A iPA-1921A
OEM124367	Band 2 - 1900 MHz Uplink Filter	1850-1910MHz	1930-1990MHz	iPA-1921A

PIM FINDER SOLUTION

SYSTEM DIAGRAM
The PIM Finder solution consists of lightweight, easy to use products that are battery powered: 1. A portable PIM Test Analyzer: iPA or iXA* series 2. Range to Fault Module: RTF 3. PIM Test probe: R29-4788 4. Protection Filter from R29-4789 5. Cable and Antenna Analyzer: iVA-0627A 6. Kaelus Unify Software for remote control of iPA and iVA. Running on iOS/Android tablet/phone, or Windows PC (*)The iXA includes 2 integrated RTF, external RTF module not required



WARNING! RF HAZARD!

The radio frequency fields near cellular antennas may exceed safe levels for human exposure. Personnel engaged in troubleshooting external PIM sources should be trained for work in radio frequency environments and use a personal RF monitor if working near active antennas.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
iVA-0627A	iVA Cable & Antenna Analyzer System
iPA series	iPA Battery Portable Passive Intermodulation Analyser
iXA series	iXA 2-Port Battery Portable Passive Intermodulation Analyser
R29-4788	PIM Test probe
iVA-SW-Fl-A	PIM Finder Mode - Software upgrade

PIM FINDER IN ACTION



PIM Finder in action