

**Main Features**

- Outstanding PIM Performance
- Field replaceable
  - Automatic detection in BaseUnit
  - Factory calibrated
- Portable with a rugged design
- Field replaceable Testport
  - 7-16 DIN and 4.3-10 DIN (-G opt)



**General**

**Dimensions**  
**Weight**  
**Internal Ports**  
**RF Port**

330 x 275 x 67 (LxWxH)  
3 – 5.75 kg (depends on frequency band)  
5 x P-SMP, SLC landing socket  
Field replaceable Testport 7-16 DIN, 4.3-10 DIN (opt)

**Environmental**

**Operating Temperature Range**  
**Storage Temperature Range**  
**Relative Humidity**  
**Mechanical shock**

-10°C to + 40°C  
-20°C to +80°C  
5% to 95% RH non-condensing  
40G

**PIM SITE ANALYZER  $\alpha$   
BAND FILTER UNIT**

**IM-B-FI-xxxx**

**PIM + Cross Band 600 -> 1900MHz  
IM-B-FI-600+RX/PCS**

<b>ETSI Band</b>	B71, B2
<b>Transmit Path</b>	
<b>Range TX1</b>	617 – 633 MHz
<b>Range TX2</b>	643 – 652 MHz
<b>Receive Path</b>	
<b>Range B71</b>	663 – 698 MHz
<b>Range B2 (Cross Band PIM)</b>	1850 – 1910 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	tbd kg

**IM-B-FI-700/B12+17 (LTE700 L)**

<b>ETSI Band</b>	B12, B17
<b>Transmit Path</b>	
<b>Range TX1</b>	728 – 740 MHz
<b>Range TX2</b>	750 – 764 MHz
<b>Receive Path</b>	
<b>Range B12+17</b>	698 – 716 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.38 kg

**IM-B-FI-700/B13+14 (LTE700 U)**

<b>ETSI Band</b>	B13, B14
<b>Transmit Path</b>	
<b>Range TX1</b>	728 – 740 MHz
<b>Range TX2</b>	750 – 764 MHz
<b>Receive Path</b>	
<b>Range B13+14</b>	776 – 798 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.33 kg

**2-Port Filter with external RX Input  
IM-B-FI-700LU-P2 (LTE700 LU)**

<b>ETSI Band</b>	B12, B13, B14, B17
<b>Transmit Path</b>	
<b>Range TX1</b>	728 – 740 MHz, switchable to Port 2
<b>Range TX2</b>	750 – 764 MHz, switchable to Port 2
<b>Receive Path</b>	
<b>Range B12+17</b>	698 – 716 MHz, on Port 1
<b>Range B13+14</b>	776 – 798 MHz, on Port 1
<b>External RX Input Port</b>	selectable for 2-Tone and Spectrum measurements
<b>Frequency Range B12+17 &amp; B13+14</b>	698 – 716 MHz & 776 – 798 MHz
<b>Connector</b>	QMA
<b>Output Power Port 2</b>	up to +45.2 dBm min. (+45.7 dBm typ.)
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	5.75 kg

**IM-B-FI-700/B28 (APT700)**

<b>ETSI Band</b>	B28
<b>Transmit Path</b>	
<b>Range TX1</b>	758 – 775 MHz
<b>Range TX2</b>	782 – 803 MHz
<b>Receive Path</b>	
<b>Range</b>	703 – 748 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.52 kg

**IM-B-FI-800/B20 (DigDiv800)**

<b>ETSI Band</b>	B20
<b>Transmit Path</b>	
<b>Range TX1</b>	790 – 803 MHz
<b>Range TX2</b>	812 – 821 MHz
<b>Receive Path</b>	
<b>Range</b>	832 – 862 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.36 kg

**IM-B-FI-850/B5 (AMPS850)**

<b>ETSI Band</b>	B5
<b>Transmit Path</b>	
<b>Range TX1</b>	869 – 880 MHz
<b>Range TX2</b>	885 – 894 MHz
<b>Receive Path</b>	
<b>Range</b>	824 – 851 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.33 kg

**IM-B-FI-900Rail/B8+ (GSM-Rail 900)**

<b>ETSI Band</b>	B8 extended
<b>Transmit Path</b>	
<b>Range TX1</b>	921 – 938 MHz
<b>Range TX2</b>	945 – 960 MHz
<b>Receive Path</b>	
<b>Range</b>	876 – 915 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.35 kg

**IM-B-FI-1400/B11+21 (LTE1400)**

<b>ETSI Band</b>	B11, B21
<b>Transmit Path</b>	
<b>Range TX1</b>	1475.9 – 1487 MHz
<b>Range TX2</b>	1494 – 1510.9 MHz
<b>Receive Path</b>	
<b>Range</b>	1427.9 – 1462.9 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	4.02 kg

**PIM SITE ANALYZER  $\alpha$   
BAND FILTER UNIT**

**IM-B-FI-xxxx**

**IM-B-FI-1800/B3 (DCS1800)**

<b>ETSI Band</b>	B3
<b>Transmit Path</b>	
Range TX1	1805 – 1840 MHz
Range TX2	1850 – 1880 MHz
<b>Receive Path</b>	
Range	1710 – 1785 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	3.89 kg

**IM-B-FI-1821/B1+3 (DCS/UMTS -> WCS)**

<b>ETSI Band</b>	<b>TX B1 and B3; RX B30</b>
<b>Transmit Path</b>	
Range TX1	1805 – 1880 MHz
Range TX2	2110 – 2170 MHz
<b>Receive Path</b>	
Range	2305 – 2535 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	3.35 kg

**IM-B-FI-1900/B2+4 (PCS/AWS1900)**

<b>ETSI Band</b>	B2, B4
<b>Transmit Path</b>	
Range TX1	1930 – 1950 MHz
Range TX2 (B2 PCS)	1970 – 1995 MHz
Range TX2 (B4 AWS)	1970 – 2155 MHz
<b>Receive Path</b>	
Range (B2 PCS)	1850 – 1910 MHz
Range (B4 AWS)	1710 – 1755 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	3.79 kg

**2-Port Filter with external RX Input  
IM-B-FI-1900AWS-P2 (PCS/AWS1900)**

<b>ETSI Band</b>	B2, B4
<b>Transmit Path</b>	
Range TX1	1930 – 1950 MHz, switchable to Port 2
Range TX2 (B2 PCS)	1970 – 1995 MHz, switchable to Port 2
Range TX2 (B4 AWS)	1970 – 2155 MHz, switchable to Port 2
<b>Receive Path</b>	
Range (B2 PCS)	1850 – 1910 MHz
Range (B4 AWS)	1710 – 1755 MHz
<b>External RX Input Port</b>	selectable for 2-Tone and Spectrum measurements
Frequency Range B2 + B4	1710 – 1910 MHz
Connector	QMA
<b>Output Power Port 2</b>	up to +45.2 dBm min. (+45.7 dBm typ.)
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	tbd kg

**PIM SITE ANALYZER  $\alpha$   
BAND FILTER UNIT****IM-B-FI-xxxx****IM-B-FI-2100/B1 (UMTS2100)**

<b>ETSI Band</b>	B1
<b>Transmit Path</b>	
<b>Range TX1</b>	2110 – 2130 MHz
<b>Range TX2</b>	2150 – 2170 MHz
<b>Receive Path</b>	
<b>Range</b>	1920 – 2060 MHz
<b>Residual PIM</b>	-125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	3.85 kg

**IM-B-FI-2350/B30 (WCS)**

<b>ETSI Band</b>	B30
<b>Transmit Path</b>	
<b>Range TX1</b>	2345 MHz – 2347 MHz
<b>Range TX2</b>	2355 MHz – 2360 MHz
<b>Receive Path</b>	
<b>Range</b>	2305 MHz – 2335 MHz
<b>Residual PIM</b>	-125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	tbd kg

**IM-B-FI-2600/B38 (TDD)**

<b>ETSI Band</b>	B38
<b>Transmit Path</b>	
<b>Range TX1</b>	2600 – 2605 MHz
<b>Range TX2</b>	2615 – 2620 MHz
<b>Receive Path</b>	
<b>Range</b>	2570 – 2590 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	tbd kg

**IM-B-FI-2600/B7 (LTE II 2600)**

<b>ETSI Band</b>	B7
<b>Transmit Path</b>	
<b>Range TX1</b>	2620 – 2640 MHz
<b>Range TX2</b>	2660 – 2695 MHz
<b>Receive Path</b>	
<b>Range</b>	2445 – 2590 MHz
<b>Residual PIM</b>	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
<b>Weight</b>	3.73 kg

**Accessories**

	Part Number	Description
<b>Useful <math>\alpha</math> Accessories</b>	IM-B-ACSRy-Bag-BU	Carrying bag for Base Unit
	IM-A-ACSRy-Bat	Battery Pack
	IM-B-ACSRy-Backpack	Backpack for accessories
	IM-B-ACSRy-Case-BU	Transportation case for Base Unit
<b><math>\alpha</math> Spare Parts</b>	60S101-KIMN1	7-16 Testport Saver for use on $\alpha$ Filter
	60S164-K00N1	4.3-10 Testport Saver for use on $\alpha$ Filter
<b>Low PIM Adaptors</b>	60S101-KIMN1	7-16 Male to 7-16 Female adapter
	60S101-SIMN1	7-16 Male to 7-16 Male adapter
	60K101-KIMN1	7-16 Female to 7-16 Female adapter
	60S153-KIMN1	7-16 Male to N Female adapter
	53S160-KIMN1	7-16 Female to N Male adapter
	60S164-K00N1	7-16 Male to 4.3-10 Female adapter
	60S164-S00N1	7-16 Male to 4.3-10 Male adapter
	60K164-S00N1	7-16 Female to 4.3-10 Male adapter
<b>PIM Standards</b>	60S110-KxxN1	-110dBm standard adapter (band specific) included with every filter unit (7-16 DIN Type)
	64S110-KxxN1	-110dBm standard adapter (band specific) included with every filter unit (4.3-10 DIN Type)
	xx: 07 LTE700; 08 DigDiv AMPS; 09 EGSM; 18 DCS; 19 PCS/AWS; 21 UMTS; 26 LTE2600; other frequencies on request	
<b>Low PIM Terminations</b>	60Z150-020	Low PIM termination (portable, with male & female ports)
	60Z150-012	Low PIM termination (Benchtop type)
<b>Tools</b>	60W000-002	32mm torque wrench
	53W010-000	18mm torque wrench
	99W057-000	Adjustable flat wrench
<b>Test Cables</b>	LC02-186-4000	Test Cable 7-16 male / 7-16 male 4.0m
	LC02-186-1500	Test Cable 7-16 male / 7-16 male 1.5m
	LC02-188-4000	Test Cable 7-16 male / N male 4.0m
	LC02-188-1500	Test Cable 7-16 male / N male 1.5m
	SLJ12SP-60M64M-2.0m-00	Test Cable 7-16 male / 4.3-10 male 2.0m
	SLJ12SP-64M64M-2.0m-00	Test Cable 4.3-10 male / 4.3-10 male 2.0m
<b>Super Flex Test Cables</b>	IM-Cable-716m-716m-3000	Test Cable 7-16 male / 7-16 male 3.0m
	IM-Cable-716m-4310m-3000	Test Cable 7-16 male / 4.3-10 male 3.0m
	IM-Cable-4310m-4310m-3000	Test Cable 4.3-10 male / 4.3-10 male 3.0m

**PIM SITE ANALYZER  $\alpha$   
BAND FILTER UNIT**

**IM-B-FI-xxxx**

**Part Number Designation**

**IM-B-BU-xxxx**

xxxx: 0727:

**Base Unit**

700-2700MHz Broadband Power Amplifier & Receiver

**IM-B-FI-xxxx**

xxxx: 700/B12+17:  
700/B13+14:  
700/B28:  
800/B20:  
850/B5:  
900R/B8+:  
1400/B11+21  
1800/B3:  
1900/B2+4:  
2100/B1:  
2350/B30:  
2600/B7:

**Filter Unit 7-16 Test port**

LTE700L (ETSI Band12 & 17)  
LTE700U (ETSI Band13 & 14)  
APT700 (ETSI Band28)  
DigDiv (ETSI Band20)  
AMPS (CDMA 800) (ETSI Band5)  
EGSM (ETSI Band8)  
LTE1400 (ETSI Band11 & 21)  
DCS (ETSI Band3)  
PCS + AWS (ETSI Band2 & 4)  
UMTS (ETSI Band1)  
WCS (ETSI Band 30)  
UMTS II / LTE II (ETSI Band7)

**IM-B-FI-xxxx-G**

xxxx: 700/B12+17-G:  
700/B13+14-G:  
700/B28-G:  
800/B20-G:  
850/B5-G:  
900R/B8+-G:  
1400/B11+21-G  
1800/B3-G:  
1900/B2+4-G:  
2100/B1-G:  
2350/B30-G:  
2600/B7-G:

**Filter Unit 4.3-10 Test port**

LTE700L (ETSI Band12 & 17)  
LTE700U (ETSI Band13 & 14)  
APT700 (ETSI Band28)  
DigDiv (ETSI Band20)  
AMPS (CDMA 800) (ETSI Band5)  
EGSM (ETSI Band8)  
LTE1400 (ETSI Band11 & 21)  
DCS (ETSI Band3)  
PCS + AWS (ETSI Band2 & 4)  
UMTS (ETSI Band1)  
WCS (ETSI Band 30)  
UMTS II / LTE II (ETSI Band7)

**IM-A-SWO-xxxx**

xxxx: CPRI

**Software option**

CPRI Measure and Cancel PIM over CPRI Fiber

**IM-B-ACSRY-xxxx**

xxxx: Case-BU:  
Bag-BU:

**Accessory**

Transport Case BaseUnit, Energy Supply,  
Transport Bag

**Order Number Example**

IM-B-BU-0727 Base unit with broadband amplifier 700 -2700 MHz, receiver, fiber CPRI unit  
IM-A-BU-Bat Single Battery Pack  
IM-B-FI-700/B12+14 Filter Insert for LTE700 Lower band (ETSI Band12,17), 7-16  
IM-B-FI-800/B20-G Filter Insert for LTE800 (ETSI Band20), 4.3-10  
IM-B-ACSRY-Bag-BU Transport Bag for Base Unit

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Kaindl B.	2017-03-24	Kaindl B.	2020-03-24	800	20-s002	Alexander Maier	2020-03-24
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