

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 α
BAND FILTER UNIT**

IM-B-FI-xxxx

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

ETSI Band	B71, B2 (RX)
Transmit Path	
Range TX1	617 – 633 MHz
Range TX2	643 – 652 MHz
Receive Path	
Range B71	663 – 698 MHz
Range B2 (Cross Band PIM)	1850 – 1910 MHz
Residual PIM	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
Weight	5.26 kg

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ETSI Band	B2, B4
Transmit Path	
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
Receive Path	
Range (B2 PCS)	1850 – 1910 MHz
Range (B4 AWS)	1710 – 1755 MHz
External RX Input Port	selectable for 2-Tone and Spectrum measurements
Frequency Range B2 + B4	1710 – 1910 MHz
Connector	QMA
Output Power Port 2	up to +45.2 dBm min. (+45.7 dBm typ.)
Residual PIM	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
Weight	5.17 kg

IM-B-FI-2100/B1 (UMTS2100)

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

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

ETSI Band	B30
Transmit Path	
Range TX1	2345 MHz – 2347 MHz
Range TX2	2355 MHz – 2360 MHz
Receive Path	
Range	2305 MHz – 2335 MHz
Residual PIM	-125 dBm (< -168 dBc), referred to 2 x +43 dBm
Weight	3.8 kg

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

ETSI Band	B38
Transmit Path	
Range TX1	2600 – 2605 MHz
Range TX2	2615 – 2620 MHz
Receive Path	
Range	2570 – 2590 MHz
Residual PIM	< -125 dBm (< -168 dBc), referred to 2 x +43 dBm
Weight	3.81 kg

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

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

Accessories

	Part Number	Description
Useful α Accessories	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
α Spare Parts	60S101-KIMN1	7-16 Testport Saver for use on α Filter
	60S164-K00N1	4.3-10 Testport Saver for use on α Filter
Low PIM Adaptors	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
PIM Standards	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	
Low PIM Terminations	60Z150-020	Low PIM termination (portable, with male & female ports)
	60Z150-012	Low PIM termination (Benchtop type)
Tools	60W000-002	32mm torque wrench
	53W010-000	18mm torque wrench
	99W057-000	Adjustable flat wrench
Test Cables	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
Super Flex Test Cables	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 α
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: 600/B71
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

LTE600 (ETSI Band71)
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: 600/B71
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

LTE600 (ETSI Band71)
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	A. Maier	2020-03-24	A00	21-s002	Alexander Maier	2021-10-08
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