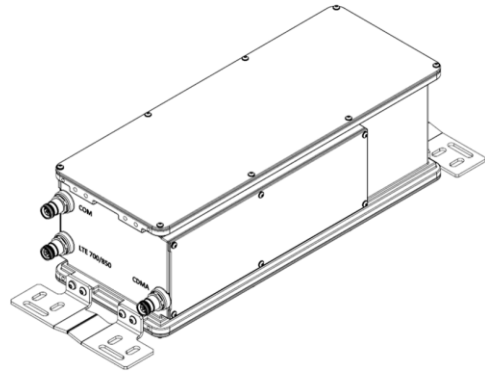


## IBC-850-BF8-1PF

DISCONTINUED

## 850 MHz LTE-CDMA In-Band Combiner

## IBC-850-BF8-1PF

*In-band 850 MHz B-block combiner**Zero guard band – no carriers lost**850 LTE (F4-F7) - 850 CDMA (F1-F3, F8)**LTE 700 passing**Rack, pole, or wall mount**4.3-10 connectors*

- Enables 850 CDMA and 850 LTE to share an antenna and feeder lines
- Supports Dual Band LTE: LTE 700 and LTE 850 through LTE port
- Up to 4 CDMA carriers and 5 MHz LTE on 850 B-block
- Low EVM (0.25%) for LTE and very low GD variation for CDMA guarantees no impact on CDMA or EVDO carriers
- Very low insertion loss leads to minimal impact on existing CDMA site coverage, and best possible LTE coverage
- High isolation (>30dB) between CDMA and LTE radios

## Electrical specifications, CDMA

	F1 – F3	F8
<b>DL</b>		
Passband DL	Ch. 384 – 466	Ch. 770
Channel insertion loss max, dB	0.75	1.0
GD, max, ns	310	115
GD, variance over channel max, ns	190	20
EVM, %	1.0 typ. / 5.0 max	0.9 max
<b>UL</b>		
Channel insertion loss max, dB	1.25	.9
GD, max, ns	410	105
GD, variance over channel max, ns	250	30
<b>DL and UL</b>		
RL min, dB	18dB	
Isolation to LTE carrier, dB	> 30	
Avg. input power per port, W	200	
Input peak envelope power, W	3000	
PIM 2x+43 dBm, dBc	-156	
DC AISG pass	Yes	

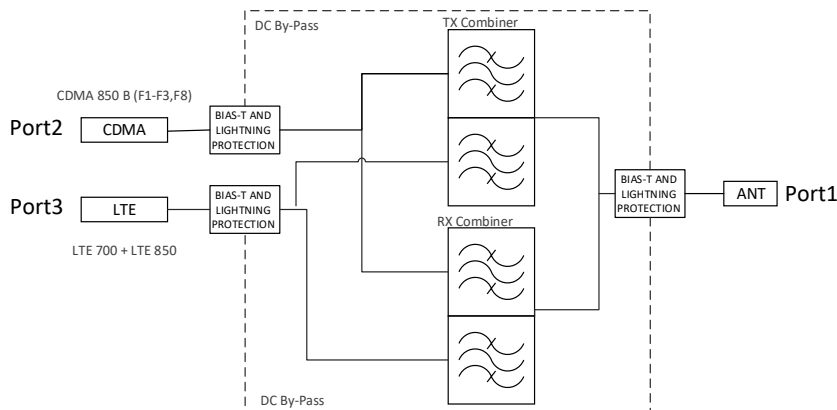
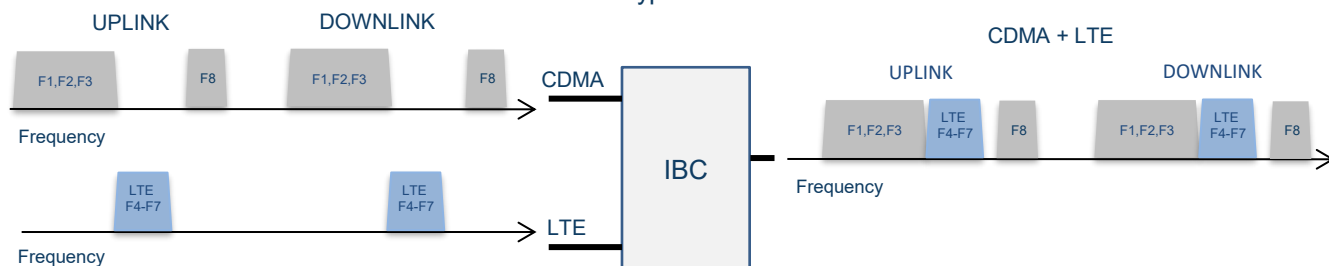
**Electrical specifications, LTE 850**

Passband DL/UL, MHz	DL (Earfcn 2585) 887.5 MHz / UL (Earfcn 20585) 842.5 MHz
LTE carrier insertion loss max, dB	0.70 (DL), 0.90 (UL)
RL min, dB	18
Group delay, avg. ns	110
Group delay, DL/UL, max, ns	550 / 570
Group delay variance over carrier, DL/UL, ns	500 / 500
EVM, DL LTE centered 887.5 MHz	< 0.03%, center RB < 0.25%, full LTE transmission BW EVM

**LTE 700 and 850**

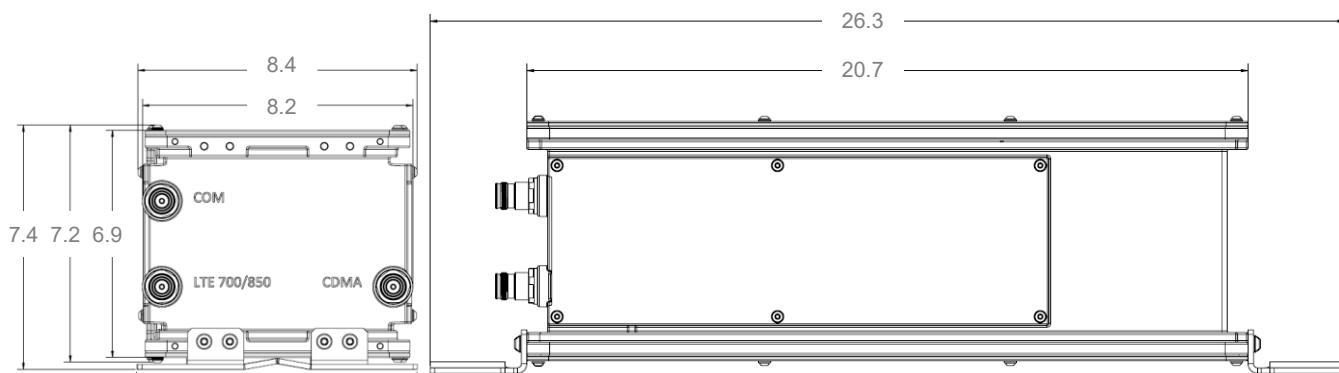
700 LTE passband, MHz	698 – 787
700 LTE insertion loss max, dB	0.55
700 LTE RL min, dB	18
Isolation to CDMA channels, dB	>30
Avg. input power per port, W	200
Input peak envelope power, W	3000
PIM 2x+43 dBm, dBc	-156
DC AISG pass	Yes

850 CDMA + 850 LTE spectrum illustration  
700 MHz bypass not shown



**Mechanical specifications**

Connectors RF	4.3-10 (F)
Ground stud	M6 x 1 (hex nut included)
Connectors quantity	3
Dimensions, excluding brackets and connectors L x W x H mm (in.)	495 x 205 x 180 (19.5 x 8 x 7.5)
Weight: kg (lb)	21.2 (43.5)
Mounting	Pole/wall bracket included. 19" rack mount HW included optional.

**Environmental specifications**

Environmental rating	ETSI EN 300 019 class 4.1, RoHS
Ingress protection	IP66, unmated
Temperature range, °C	-40 to +65
Temperature range, °F	-40 to +149
Lightning protection all ports	RF port: ±10kA max. (8/20us), IEC 61000-4-5
Altitude	3,000 m max.   10,000 ft. max.
Mean time between failures (MTBF)	>10 <sup>6</sup>

**Ordering information**

IBC-850-BF8-1PF	In-band combiner, 850MHz full B-block, single, DC/AISG-pass
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