

IBC-850-BF8-1PF

In-band 850 MHz B-block combiner

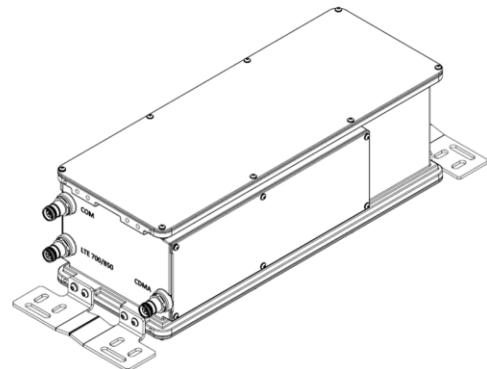
Zero guard band – no carriers lost

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
DL		
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
UL		
Channel insertion loss max, dB	1.25	.9
GD, max, ns	410	105
GD, variance over channel max, ns	250	30
DL and UL		
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	

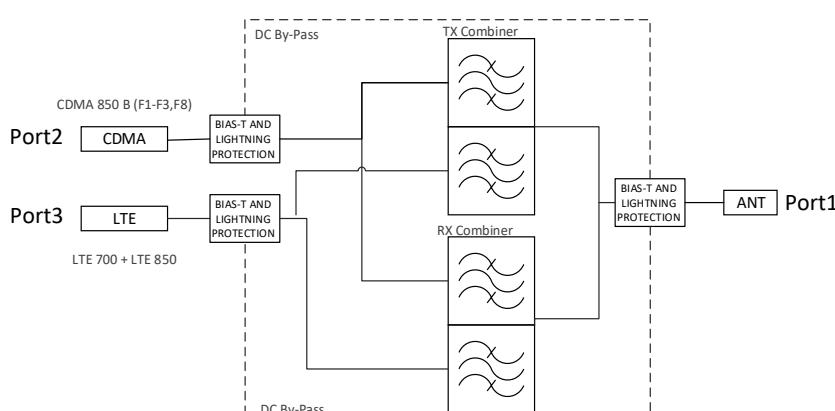
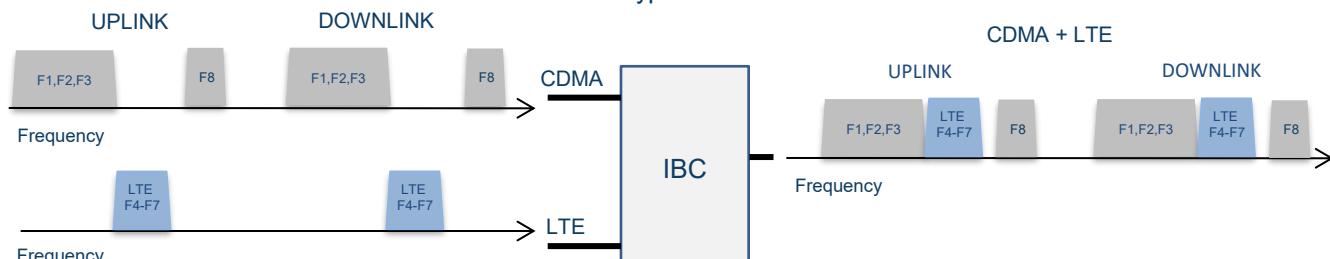
Electrical specifications, LTE 850

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

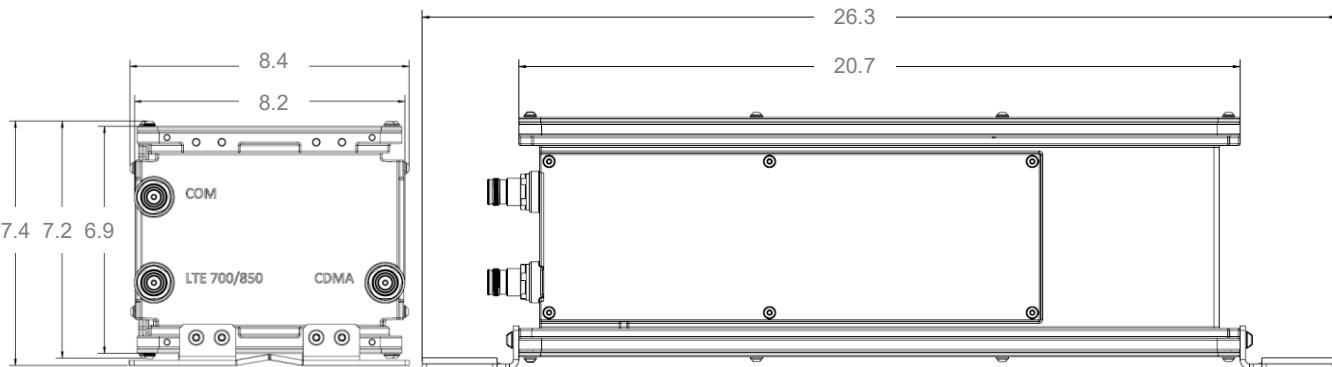
700 LTE passband, MHz	698 – 787
700 LTE insertion loss max, dB	0.55
700 LTE RL min, dB	18
Isolation to CDMA channels, dB	>30
Avg. input power per port, W	200
Input peak envelope power, W	3000
PIM 2x+43 dBm, dBc	-156
DC AISG pass	Yes

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)	>10^6

Ordering information

IBC-850-BF8-1PF

In-band combiner, 850MHz full B-block, single, DC/AISG-pass