

TBC0020F1Vxx-1

| 700/850/PCS-AWS TRIPLEXER, OUTDOOR



Designed to combine 700 850 and PCS/AWS technologies the Kaelus TBC0020 provides a low loss combiner with excellent insertion loss and passive inter-modulation performance.

PRODUCT FEATURES

- Combines 700, 850, and high band 1710-2170 BTS into one feeder
- Very low insertion losses
- Designed for low Passive Intermodulation
- Various DC throughput options with optional sniffer port
- Wall or pole mounting

TECHNICAL SPECIFICATIONS |

| 700 BAND

Passband	698 to 746MHz
Max insertion loss	0.2dB
Return loss	20dB min

| 850 BAND

Passband	824 to 894MHz
Max insertion loss	0.2dB
Return loss	20dB min

| HIGH BAND

Passband	1710 to 2170MHz
Max insertion loss	0.2dB
Return loss	20dB min

TECHNICAL SPECIFICATIONS CONTINUED |

| GENERAL SPECIFICATIONS

Isolation from port to port	60dB min
Phase linearity over any 10MHz	< 10°
Group delay over any 10MHz	< 5ns
CW power	500 watts
Peak envelope power	5000 watts
PIM	< -155dBc with 2 x 20W (3rd order)
Sniffer/monitor port coupling (optional)	-40 dB nom, relative to COM port

| DC / AISG

See option table for DC port configuration	
Compatibility	AISG 1.1 and 2.0
DC current rating	2A continuous, 4A peak
DC voltage range	31 V max

| ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.	
Operating temperature range	-40°C to +65°C -40°F to +149°F
Environmental sealing	IP67, ETSI EN 300 019 class 4.1
Lightning protection	5kA (8/20us) on RF Ports
ROHS compliance	Yes
Altitude	3000 m max 9842ft
MTBF	>1,000,000 hours

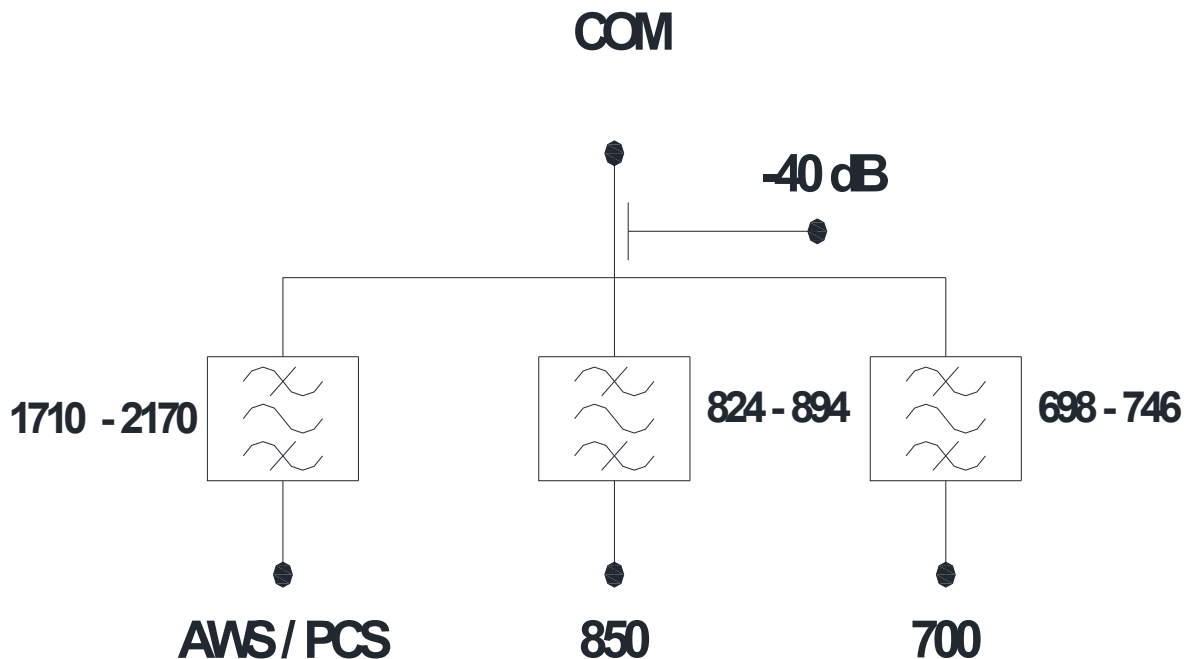
| MECHANICAL

Dimensions excluding connectors & brackets	See mechanical drawings
Weight	5.9 kg 13lbs
Finish	Painted, light grey (RAL7035)
Connectors	7-16 DIN (F) long neck x 3 N-female x1 (optional sniffer port only)
Mounting	Wall or pole mount

ORDERING INFORMATION |

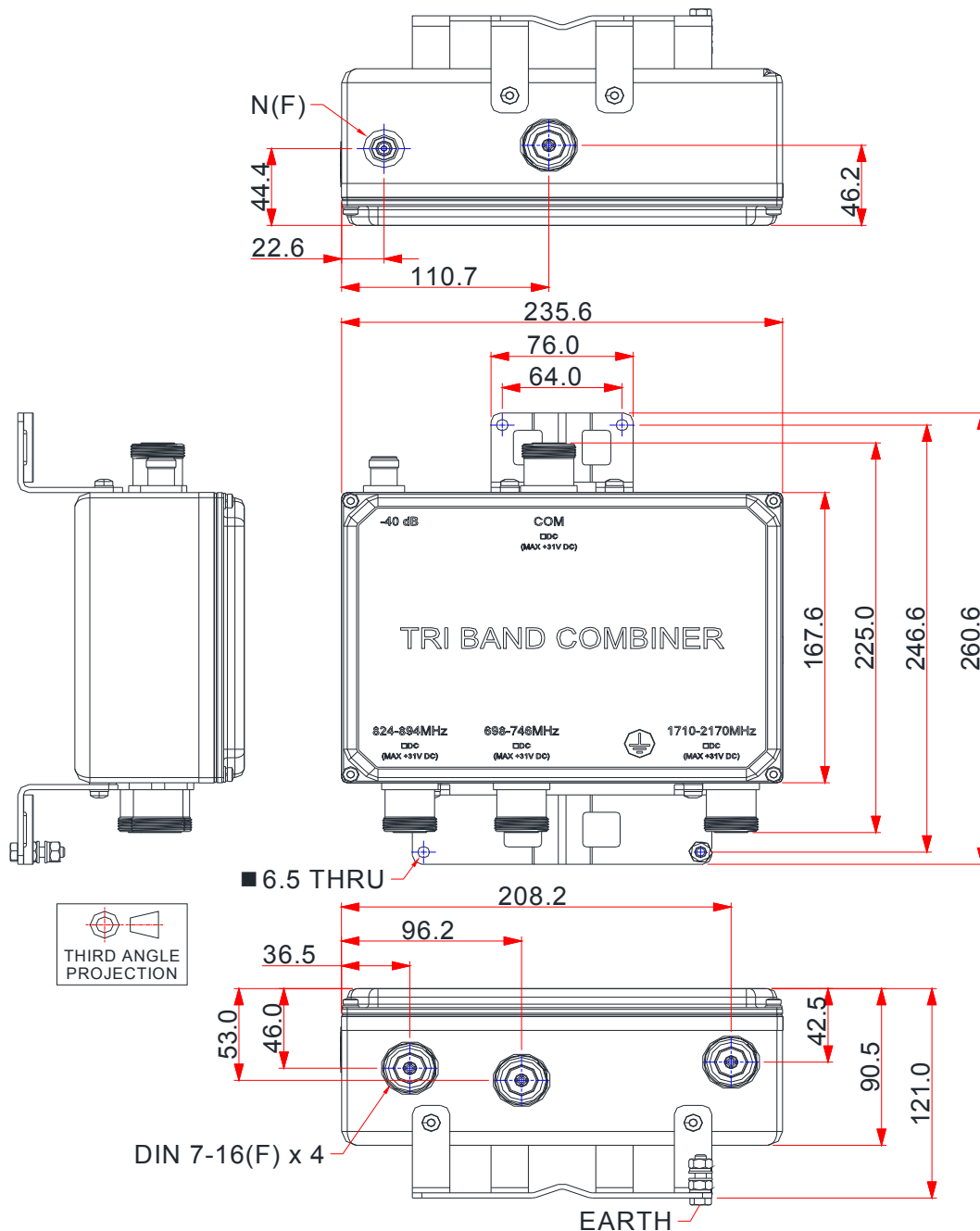
Kaelus Part Number	Kaelus Description
TBC0020F1V31-1	700MHz/850MHz/PCS-AWS triplexer, DC through to 700MHz Port, single unit, with sniffer port
TBC0020F1V32-1	700MHz/850MHz/PCS-AWS triplexer, DC through to 850MHz Port, single unit, with sniffer port
TBC0020F1V33-1	700MHz/850MHz/PCS-AWS triplexer, DC through to both 700 and 850MHz Ports, single unit, with sniffer port
TBC0020F1V34-1	700MHz/850MHz/PCS-AWS triplexer, DC through to PCS-AWS Port, single unit, with sniffer port
TBC0020F1V35-1	700MHz/850MHz/PCS-AWS triplexer, No Dc through, single unit, with sniffer port

ELECTRICAL BLOCK DIAGRAM |



(TBC0020F1V35-1 shown)

MECHANICAL BLOCK DIAGRAM |



(TBC0020F1V35-1 shown)

Information contained within this datasheet is valid at the time of release and may be reviewed by Kaelus at any time.