kAelus

RF CONDITIONING SOLUTIONS - The Americas

Product Ordering Guide

an INFINITE company

RF CONDITIONING SOLUTIONS

Kaelus' extensive knowledge and experience in Passive Intermodulation (PIM) extends to its family of RF filtering products and solutions. Kaelus offers a wide array of filter products which deliver best-in-class PIM performance including dual, triple and quad banding filters, as well as tower mounted amplifiers. Kaelus's innovative universal configuration allows operators to readily combine and optimize site assets, maximizing performance at lower costs.

RF Combiners

Diplexers

- Combines or splits two frequency bands on a single feeder
- Outstanding RF and PIM Performance
- Excellent port-to-port isolation
- Environmentally rugged
- Customized solutions available

Single

Twin

Rack

Kaelus Part #	Description	Pkg	Band 1 MHz	Band 2 MHz	AISG / DC Path
CA911F2V10	Cross Band Combiner, 835-844.7 / 880-889.7 & 891.9-898.6 / 936.9-943.6, 19" Rack Mount	Twin	835-844.7 / 880-889.7	891.9-898.6 936.9-943.6	No DC Path
CA911F3V11	Cross Band Combiner, 830-844.6 / 879.8-889.6 & 891.9-898.6 / 936.9-943.6, 19" Rack Mount	Twin	830-844.6 / 879.8-889.6	891.9-898.6 936.9-943.6	No DC Path
DBC0021F1V1-1	Cross Band Combiner, 1710-1880 & 1920-2170	Single	1710-1880	1920-2170	2100 Port
DBC0021F1V2-1	Cross Band Combiner, 1710-1880 & 1920-2170	Single	1710-1880	1920-2170	1800 Port
DBC0021F1V3-1	Cross Band Combiner, 1710-1880 & 1920-2170	Single	1710-1880	1920-2170	1800 & 2100 Ports
DBC0021F1V4-1	Cross Band Combiner, 1710-1880 & 1920-2170	Single	1710-1880	1920-2170	No DC Path
DBC0021F1V21-2	Cross Band Combiner, 1710-1880 & 1920-2170	Twin	1710-1880	1920-2170	2100 Port
DBC0021F1V22-2	Cross Band Combiner, 1710-1880 & 1920-2170	Twin	1710-1880	1920-2170	1800 Port
DBC0021F1V23-2	Cross Band Combiner, 1710-1880 & 1920-2170	Twin	1710-1880	1920-2170	1800 & 2100 Ports
DBC0021F1V24-2	Cross Band Combiner, 1710-1880 & 1920-2170	Twin	1710-1880	1920-2170	No DC Path
DBC0037F1V1-1	Cross Band Combiner, 698-960 & 1710-2170, Sniffer Port	Single	698-960	1710-2170	Autosence
DBC0037F1V2-1	Cross Band Combiner, 698-960 & 1710-2170	Single	698-960	1710-2170	Autosence
DBC0037F2V1-1	Cross Band Combiner, 698-960 & 1695-2200, Sniffer Port	Single	698-960	1695-2200	Autosence
DBC0037F2V1-2	Cross Band Combiner, 698-960 & 1695-2200, Sniffer Port	Twin	698-960	1695-2200	Autosence
DBC0037F2V2-1	Cross Band Combiner, 698-960 & 1695-2200	Single	698-960	1695-2200	Autosence
DBC0037F2V2-2	Cross Band Combiner, 698-960 & 1710-2200	Twin	698-960	1695-2200	Autosence
DBC0041F2V1	Cross Band Combiner, 825-835 / 870-880 & 906.8-915 / 951.8-960, 19" Rack Mount	Single	825-835 / 870-880	906.8-915 / 951.8-960	850 Port
DBC0041F2V2	Cross Band Combiner, 825-835 / 870 -880 & 906.8-915 / 951.8-960, 19" Rack Mount	Single	825 - 835 / 870-880	906.8-915 / 951.8-960	900 Port
DBC0041F2V3	Cross Band Combiner, 825-835 / 870 -880 & 906.8-915 / 951.8-960, 19" Rack Mount	Single	825 - 835 / 870-880	906.8-915 / 951.8-960	850 & 900 Ports
DBC0041F2V4	Cross Band Combiner, 825-835 / 870 -880 & 906.8-915 / 951.8-960, 19" Rack Mount	Single	825 - 835 / 870-880	906.8-915 / 951.8-960	No DC Path
DBC0042F2V51-1	Dual Band Combiner, 698-960 & 1710-2200, DC Switch	Single	698-960	1695-2200	Field Selectable
DBC0042F2V51-2	Dual Band Combiner, 698-960 & 1710-2200, DC Switch	Twin	698-960	1695-2200	Field Selectable
DBC0042F2V51-6R	Dual Band Combiner, 698-960 & 1695-2200, 6 Units, 19" or 23" Rack, DC Switch	Rack	698-960	1695-2200	Field Selectable

Diplexers continued

DBC0051F3V51-1	Dual Band Combiner, 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Single	AWS	1850-1900	Field Selectable
DBC0051F3V51-2	Dual Band Combiner, 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Twin	AWS	1850-1900	Field Selectable
DBC0055F1V51-1	Dual Band Combiner, 698-960 & 1710-2700, DC Switch	Single	698-960	1710-2700	Field Selectable
DBC0055F1V51-2	Dual Band Combiner, 698-960 & 1710-2700, DC Switch	Twin	698-960	1710-2700	Field Selectable
DBC0056F1V51-1	Dual Band Combiner, 698-746 & 824-894, DC Switch	Single	698-746	824-894	Field Selectable
DBC0056F1V51-2	Dual Band Combiner, 698-746 & 824-894, DC Switch	Twin	698-746	824-894	Field Selectable
DBC0058F1V1-1	Cross Band Combiner, 790-862 & 880-906	SIngle	790-862	880-906	No DC Path
DBC0058F1V2-1	Cross Band Combiner, 790-862 & 880-906	SIngle	790-862	880-906	800 Port
DBC0061F1V51-1	Dual Band Combiner, 698-798 & 824-894, DC Switch	Single	698-798	824-894	Field Selectable
DBC0061F1V51-2	Dual Band Combiner, 698-798 & 824-894, DC Switch	Twin	698-798	824-894	Field Selectable
DBC0061F1V51-6R	Dual Band Combiner, 698-798 & 824-894, 6 Units, 19" or 23" Rack, DC Switch	Rack	698-798	824-894	Field Selectable
DBC0062F1V51-1	Dual Band Combiner, 1710-2170 & 2350-2360, DC Switch	Single	1710-2170	2305-2360	Field Selectable
DBC0068F1V1-1	Cross Band Combiner, 698-803 & 898.4-951.8	Twin	698-803	898.4-951.8	700 Port
DBC0068F1V3-1	Cross Band Combiner, 698-803 & 898.4-951.8	Twin	698-803	898.4-951.8	700 & 900 Ports
DBC0081F1V2-1	Same Band Combiner, PCS , DC / AISG Through to both PCS Ports	Twin	1930-1945	1965-1990	B1 & B2 Port
DBC0081F1V1-1	Same Band Combiner, PCS , DC / AISG Through to B1 PCS Port	Single	1930-1945	1965-1990	B1 Port
DBC0081F1V3-1	Same Band Combiner, PCS , DC / AISG Through to B2 PCS Port	Twin	1930-1945	1965-1990	B2 Port
DBC0081F1V51-1	Same Band Combiner, PCS , DC Switch	Single	1930-1945	1965-1990	Field Selectable
DBC2037F1V1-1	Cross Band Combiner,698-960 and 1710-2170, Sniffer Port, AISG Modem	Single	698-960	1710-2170	Autosence AISG
DBC2037F1V1-2	Cross Band Combiner,698-960 and 1710-2170, Sniffer Port, AISG Modem	Twin	698-960	1710-2170	Autosence AISG
DBC2046F1V2-1	Cross Band Splitter, 698-960 and 1710-2170, AISG Modem	Single	698-960	1710-2170	Autosence on HI
DBC2046F1V2-2	Cross Band Splitter, 698-960 and 1710-2170, AISG Modem	Twin	698-960	1710-2170	Autosense on Hi
DBC2055F1V1-1	Dual Band Combiner, 698-960 and 1710-2700, AISG Modem	Single	698-960	1710-2700	Autosense
DBC2055F1V1-2	Dual Band Combiner, 698-960 and 1710-2700, AISG Modem	Twin	698-960	1710-2700	Autosense
DDF0019F1V1-1	Outdoor Filter, WCDMA850, Dual Duplex	Twin	870-885	N/A	No DC Path
DDF0019F2V2-1	Outdoor Filter, WCDMA850, Dual Duplex	Twin	870-885	N/A	BTS0 & BTS1 Port

DC / AISG Switch

- Kaelus multi-band combiners offer the ability to field configure DC / AISG routing through the unit
- Field-selectable DC/AISG path is achieved via mechanical links on an IEC601309, 8-pin female connector
- Each specific, color-coded, removable link connects the DC / AISG from a specific input RF port connector to the common output RF port connector
- An installed link connects the ports and a removed link disconnects the ports
- Identical configuration is used on two, three and four band combiners

RF CONDITIONING SOLUTIONS

Triplexers

- Combine or split three frequency bands on a single feeder
- Integrated field configurable, mechanical, DC / AISG pass switch
- Outstanding RF and PIM performance
- Excellent port to port isolation
- Environmentally rugged
- Customized solutions available


Single


Twin


Rack

Kaelus Part #	Description	Package	Band 1 MHz	Band 2 MHz	Band 3 MHz	AISG/DC Path
TBC0020F1V52-1	698-746 & 824-894 & 1710-2170, Sniffer Port, DC Switch	Single	698-746	824-894	1710-2170	Field Selectable
TBC0026F2V51-1	698-798 & 824-894 & 1695-2200, DC Switch	Single	698-798	824-894	1695-2200	Field Selectable
TBC0026F2V51-2	698-798 & 824-894 & 1695-2200, DC Switch	Twin	698-798	824-894	1695-2200	Field Selectable
TBC0026F2V51-6R	698-798 & 824-894 & 1695-2200, 6 Units, 19" or 23" Rack, DC Switch	Rack	698-798	824-894	1695-2200	Field Selectable
TBC0030F2V1-1	698-798 & 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Single	698-960	1695-1780 / 2110-2200	1850-1990	Field Selectable
TBC0030F2V1-2	698-798 & 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Twin	698-960	1695-1780 / 2110-2200	1850-1990	Field Selectable
TBC0037F1V51-1	1850-1990 & 1710-1770 / 2110-2170 & 2302-2360, DC Switch	Twin	1850-1990	1710-1770 / 2110-2170	2302-2360	Field Selectable
TBC0076F5V51-1	800-960 & 1710-1880 & 1920-2170	Single	800-960	1710-1880	1920-2170	Field Selectable
TBC0076F5V51-2	800-960 & 1710-1880 & 1920-2170	Twin	800-960	1710-1880	1920-2170	Field Selectable
TBC0076F6V51-1	790-960 & 1710-1880 & 1920-2170	Single	790-960	1710-1880	1920-2170	Field Selectable
TBC0076F6V51-2	790-960 & 1710-1880 & 1920-2170	Twin	790-960	1710-1880	1920-2170	Field Selectable

Quadplexers

- Combine or split four frequency bands on a single feeder
- Integrated field configurable, mechanical, DC / AISG pass switch
- Outstanding RF and PIM performance
- Excellent port-to-port isolation
- Environmentally rugged
- Customized solutions available


Single


Twin


Rack

Kaelus Part #	Description	Pkg	Band 1 MHz	Band 2 MHz	Band 3 MHz	Band 4 MHz	AISG/DC Path
QBC0002F2V51-1	698-793 & 824-894 & 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Single	698-793	824-894	1695-1780 / 2110-2200	1850-1990	Field Selectable
QBC0002F2V51-2	698-793 & 824-894 & 1695-1780 / 2110-2200 & 1850-1990, DC Switch	Twin	698-793	824-894	1695-1780 / 2110-2200	1850-1990	Field Selectable
QBC0002F2V51-6R	698-793 & 824-894 & 1695-1780 / 2110-2200 & 1850-1990, 6 Units, 19" to 23" Rack DC Switch	Rack	698-793	824-894	1695-1780 / 2110-2200	1850-1990	Field Selectable
QBC0003F1V51-1	698-960 & 1710-1880 & 1920-2170 & 2500-2690	Single	698-960	1710-1880	1920-2170	2500-2690	Field Selectable
QBC0007F1V51-1	698-793 & 824-894 & 1710-2170 & 2305-2360, DC Switch	Single	698-798	824-894	1710-2170	2305-2360	Field Selectable
QBC0007F1V51-2	698-793 & 824-894 & 1710-2170 & 2305-2360, DC Switch	Twin	698-798	824-894	1710-2170	2305-2360	Field Selectable

In the tables above, AISG / DC path terms have the following meanings. All paths referenced to the common port.
Autosence AISG :: Will route AISG / DC from any input port, defaults to AISG port if DC is available, otherwise acts like Autosence
Autosence :: Will route AISG / DC from any input port, defaults to high band port if DC is available on both ports
Autosence Out On Hi :: Will route AISG / DC out to Hi band antenna port, IF TMA or Open are detected
Field Selectable :: Will route AISG / DC from any input port, path is set by inserting appropriate pins into the DC switch

Tower Mounted Amplifiers

- Full AISG and CWA operation
- Uplink gain which improves system noise performance
- Integrated filter designs remove unwanted interference while amplifying the uplink path, improving performance in highly congested RF environments
- Improvement of site coverage in uplink limited systems
- Multiband units provide internal multi-band combining saving OPEX and CAPEX
- Especially useful for modern wide band antenna systems


Single


Twin

Kaelus Part #	Description	Package	Active Bands	Bypass
TMA2009F5V3-1	UMTS2100 60 MHz BW 800 / 850 / 900 Bypass Dual Duplex, TMA	Twin	1920-1980 / 2110-2170	790-960
TMA2013F00V4-1	UMTS2100 60MHz BW, Dual Duplex, Twin TMA	Twin	1920-1980 / 2110-2170	N/A
TMA2035F00V1-1	PCS 1900, Full Band, Dual Duplex	Twin	1850-1990	N/A
TMA2036F00V1-1	GSM1800 Full Band, Dual Duplex, Twin TMA	Twin	1710-1785 / 1805-1880	N/A
TMA2038F10V1-1	900 MHz Full Band, Dual Duplex, Twin TMA	Twin	890-915 / 935-960	N/A
TMA2038F20V1-1	900 MHz Full Band, Dual Duplex, Twin TMA	Twin	880-905 / 925-950	N/A
TMA2040F00V1-1	850 MHz Twin TMA with AISG	Twin	824-849 / 869-894	N/A
TMA2042F1V1-1	AWS 700, Dual Band	Single	698-746 & 1710-1770 / 2110-2170	N/A
TMA2043F1V1-1	AWS 700, Bypass	Twin	1710-1770 / 2110-2170	698-746
TMA2044F1V1-1	AWS, AISG 2.0	Twin	1710-1770 / 2110-2170	N/A
TMA2048F1V1-1	850 / 900 MHz Dual Band Twin TMA, AISG	Twin	825-835 / 870-880 & 906.8-915 / 951.8-960	N/A
TMA2050F00V1-1	GSM900 Part Band, Twin AISG TMA	Twin	898-915 / 943-960	N/A
TMA2053F00V1-1	1800 / 2100 MHz, Dual Band, Twin TMA, AISG 2.0	Twin	1710-1785 / 1805-1880 & 1920-1980 / 2110-2170	N/A
TMA2059F00V1-1	EGSM900 Twin TMA, AISG	Twin	880-915 / 925-960	N/A
TMA2061F1V1-1	PCS 1900, Full Band	Twin	1850-1990	698-960
TMA2062F00V1-1	LTE 2600 FDD Twin TMA, AISG	Twin	2500-2570 / 2620-2690	N/A
TMA2063F00V1-1	800 MHz European LTE, Twin TMA, with AISG 2.0	Twin	791-821 / 832-862	N/A
TMA2066F00V1-1	AWS 1900, Dual Band, AISG2.0	Twin	1850-1990 & 1710-1770 / 2110-2170	N/A
TMA2068F00V1-1	Micro Twin 2100 MHz TMA, 60 MHz BW, AISG2.0	Twin	1920-1980 / 2110-2170	N/A
TMA2071F00V1-1	850 / 1900, Dual Band, AISG2.0	Twin	824-849 & 1850-1990	N/A
TMA2072F00V1-1	AWS, 700 Bypass, AISG2.0	Twin	1710-1770 / 2110-2170	698 - 795
TMA2077F00V1-1	1800 / 2100 Dual Band TMA,Lo Band Bypass, AISG2.0	Twin	1710-1785 / 1805-1880 & 1920-1980 / 2110-2170	698-960
TMA2077F01V2-1	1800 / 2100 Dual Band TMA, Lo Band Bypass, AISG2.0 / DC Bypass	Twin	1710-1785 / 1805-1880 & 1920-1980 / 2110-2170	698-960
TMA2089F00V1-1	AWS, 1900 Bypass, AISG2.0	Twin	1710-1770 / 2110-2170	1850-1990
TMA2089F01V2-1	AWS, 1900 Bypass, AISG2.0, DC Pass to Antenna Port	Twin	1710-1770 / 2110-2170	1850-1990
TMA2092F00V1-1	700, 850 Bypass, AISG2.0	Twin	D/L 746.5-755.5 & U/L 777.5-186.5	824-894
TMA2093F00V1-1	AWS,1900, Dual Band, Lo Band Bypass, AISG2.0	Twin	1850-1990 & 1710-1770 / 2110-2170	698-960
TMA2094F01V2-1	700 MHz Twin TMA, 850-900 Bypass, AISG2.0 / DC Bypass	Twin	713-748 / 768-803	807-960
TMA2104F00V1-1	WCS, 700 / 850 Bypass, AISG2.0	Twin	2305-2360	698-894
TMA2105F01V1-1	700 / 850 Dual Band, AISG2.0, DC Pass to Low Band Antenna Port	Twin	713-803 & 830-890	N/A
TMA2116F00V1-1	AWS / WCS, Dual Band, 700 / 850 Bypass, AISG2.0	Twin	2305-2360 & 1710-1755 / 2110-2155	698-894
TMA2117F00V1-1	PCS / WCS, Dual Band, 700 / 850 Bypass, AISG2.0	Twin	2305-2360 & 1850-1990	698-894

Duplexers

Kaelus TX-RX combiners, also known as duplexers are designed for cost effective antenna sharing between uplink and downlink signals. Used for combining or splitting different frequency bands on the same feeder systems, TX-RX Combiners will save CAPEX by minimizing hardware components during installation.

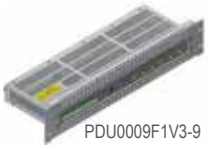
- Combine or split TX and RX paths on a single feeder
- Outstanding RF and PIM performance
- Excellent port-to-port isolation
- Customized solutions available

Kaelus Part #	Description	Downlink	Uplink
DPX0001F1V2	700 Upper C Band Duplexer	746-757	776-787
DPX0002F1V1	850 Band Duplexer	869-894	824-849
DPX0003F1V1	900 Band Duplexer	925-960	880-915
DPX0004F1V1	PCS / 1900 Full Band Duplexer	1930-1990	1850-1910
DPX0005F1V1	700 Low Band Duplexer	728-746	698-716
DPX0006F1V1	AWS Band Duplexer	2110-2170	1710-1770

RF Accessories

Power Distribution Units, Bias-T, Terminations


ACU0001F1V1-1


PDU0009F1V3-9

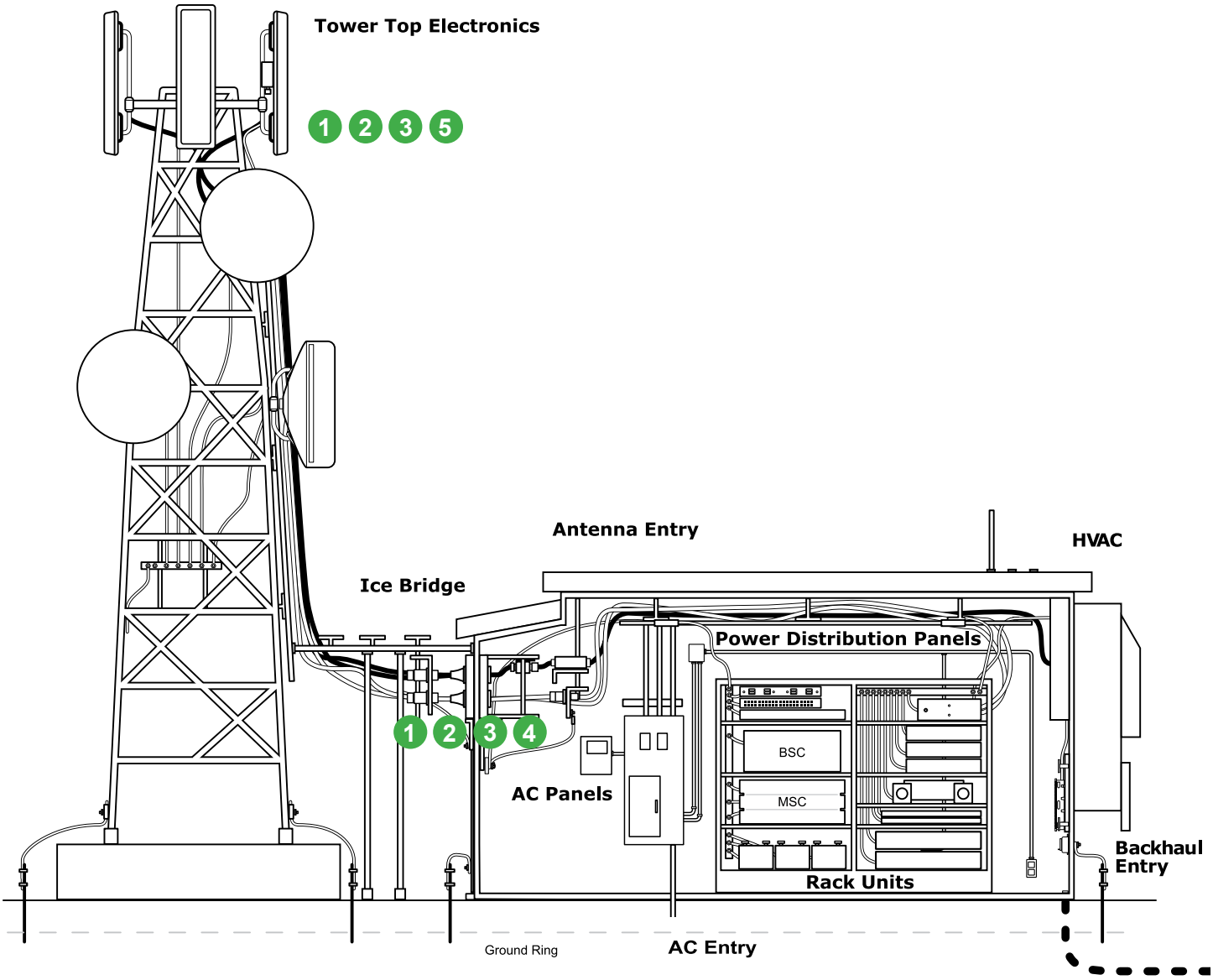

SBT0001F1V2

Kaelus Part Number	Description
ACU0001F1V1-1	AISG Controller
DCI0010F1V1	Bias Tee, 698-2700 MHz, DC in SMA, DIN (F) to Antenna
DCI0010F1V2	Bias Tee, 698-2700 MHz, DC in SMA, DIN (M) to Antenna
DCI0010F1V3	Bias Tee, 698-2700 MHz, DC / AISG in SMA, DIN (F) to Antenna
DCI0010F1V4	Bias Tee, 698-2700 MHz, DC / AISG in SMA, DIN (M) to Antenna
PDU0009F1V3-9	6-Way Power Distribution Unit High Power (PDU)
SBT0001F1V1	AISG Smart Bias Tee, Bottom of the Tower, DIN (F) to Antenna
SBT0001F1V2	AISG Smart Bias Tee, Top of the Tower, DIN (F) to BTS
SBT0001F1V3	AISG Smart Bias Tee, Bottom of the Tower, DIN (M) to Antenna
SBT0001F1V4	AISG Smart Bias Tee, Top of the Tower, DIN (M) to BTS
ST0462	Wide Band, Male 7 / 16 Termination, 2 Watt
ST1819	Wide Band, Male SMA Termination, 2 Watt

AISG Cables

Kaelus Part Number	Description	Length (m)
R18-0749-05	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	0.5
R18-0749-1	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	1
R18-0749-2	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	2
R18-0749-3	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	3
R18-0749-4	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	4
R18-0749-5	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	5
R18-0749-10	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	10
R18-0749-15	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	15
R18-0749-20	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	20
R18-0749-25	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	25
R18-0749-30	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	30
R18-0749-40	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	40
R18-0749-50	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	50
R18-0749-60	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	60
R18-0749-70	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	70
R18-0749-80	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	80
R18-0749-90	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	90
R18-0749-100	Xtreme Weather AISG Ret 8 Pin Cable Male To Female	100

Telecommunication Solutions



Diplexers

Designed for cost effective antenna sharing between uplink and downlink signals

1

Triplexers

Combine or split three frequency bands on a single feeder

2

Quadplexers

Combine or split four frequency bands on a single feeder

3

Duplexers

Designed for cost effective antenna sharing between uplink and downlink signals

4

Tower Mounted Amplifiers

2300 MHz twin TMA with 700-850 bypass, AISG 2.0

5

kaelus

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