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# 2012

# VHF






## OMNI ANTENNAS

Model Number	Frequency (MHz)	Bandwidth (MHz)	Type	Gain (dBd)	Vertical Beamwidth (degrees)	Isolation min. (dB)	Length, ft(m)	Radome O.D., in(cm)	Net Weight w/o bracket, lb(kg)	Shipping Weight, lb(kg)
DS1E03F36U-D	140-150	11	Single	3	30	N/A	14.9 (4.5)	3 (7.6)	43 (19.5)	73 (33.1)
DS1E06F36U-D	140-150	11	Single	6	16	N/A	22.9 (7)	3 (7.6)	65 (29.5)	95 (43.1)
DS1E03F36D-D	140-150	11	Dual	3	30	30	24.3 (7.4)	3 (7.6)	70 (31.8)	100 (45.4)
DS1F00F36U-D	150-164	15	Single	0	65	N/A	8.2 (2.5)	3 (7.6)	20 (9.1)	40 (18.1)
DS1F03F36U-D	150-164	15	Single	3	30	N/A	12.6 (3.8)	3 (7.6)	37 (16.8)	67 (30.4)
DS1F06F36U-D	150-164	15	Single	6	16	N/A	21.9 (6.7)	3 (7.6)	60 (27.2)	90 (40.8)
DS1F03F36D-D	150-164	15	Dual	3	30	30	22.3 (6.8)	3 (7.6)	63 (28.6)	93 (42.2)
DS1G03F36U-D	160-174	15	Single	3	30	N/A	12.7 (3.9)	3 (7.6)	37 (16.8)	67 (30.4)
DS1G06F36U-D	160-174	15	Single	6	16	N/A	21.9 (6.7)	3 (7.6)	60 (27.2)	90 (40.8)
DS1G03F36D-D	160-174	15	Dual	3	30	30	22.3 (6.8)	3 (7.6)	63 (28.6)	93 (42.2)
DS2C00F36U-D	217-222	6	Single	0	60	N/A	7.7 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
DS2C03F36U-D	217-222	6	Single	3	30	N/A	9.9 (3)	3 (7.6)	26 (11.8)	56 (25.4)
DS2C06F36U-D	217-222	6	Single	6	16	N/A	18.1 (5.5)	3 (7.6)	47 (21.3)	77 (34.9)
DS2C00F36D-D	217-222	6	Dual	0	60	30	12.6 (3.8)	3 (7.6)	40 (18.1)	70 (31.8)
DS2C03F36D-D	217-222	6	Dual	3	30	30	18.6 (5.7)	3 (7.6)	70 (31.8)	100 (45.4)




## COMBINERS

Model	Short Haul	VHF	Hybrid Transmitter	DS4548D	DS4345D Series	DB4348 Series	DS4345 Series
							
Type	Control Station	Control Station	Transmitter	Dual 5" & 8" Cavity	Dual 5" Cavity	Single 8" Cavity	Single 5" Cavity
Frequency Range (MHz)	100-960	118-174	150-174	148-174	148-174	148-174	148-174
Frequency Separation (kHz)	No limitations	No limitations	No limitations	75 (50 w/ load kit)	150	75	150
Number of Channels	8 or 16	4, 8, 12 or 16	2, 3 or 4	2 to 6	2 to 6	2 to 7	2 to 6
Isolation - Tx to Tx (dB)	60 min	60 min / 70 typ	70 min / 75 typ	80 min	75 min / 80 typ	75 min / 80 typ	75 min / 80 typ
Isolation - Ant to Tx (dB)	30 min / 35 typ	45 min / 55 typ	50 min / 55 typ	70 min	70 min / 75 typ	70 min / 75 typ	70 min / 75 typ
Insertion Loss - (typ)(dB)	8 ch. 33 / 16 ch. 39	4 ch. RX 9.7 / TX 8.5	4 ch. 7.5	4 ch. 5.1	4 ch. 4.8	4 ch. 4.5	4 ch. 4.0

## DUPLEXERS

Model	DB4059-A	DB4059	DB4060	DB4062	DS3001-4DUP
					
Type	Bandpass Reject	Bandpass Reject	Bandpass Reject	Bandpass Reject	Window Filter
Frequency Range (MHz)	138-150	148-174	138-174	138-174	150-174
Frequency Separation (kHz)	750	750	500	300	250
Isolation (dB)	70	70	80	100	75
Insertion Loss (typ) (dB)	1.4	1.2	1.5	2.2	1.2

## FILTERS

Model	DB4001N-1	DB4001N-2	DB4001N-3	DSWF1004	DSWF1005	DB3001-4 Series
						
Type	Bandpass	Bandpass	Bandpass	Bandpass Window	Bandpass Window	Bandpass Window
Frequency Range (MHz)	150-174	148-174	148-174	148-174	148-174	150-174
Pass Bandwidth (MHz)	variable	variable	variable	0.5	1.0	2
Isolation (dB)				45 min at ± 1 MHz	50 min at ± 1 MHz	75 min
Insertion Loss (dB)	0.5 to 2	1.0 to 4	1.9 to 6.4	2.0 (max)	2.5 (max)	1.2




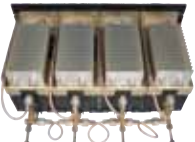

## RX MULTICOUPLERS

Model	DBSMC Series	DBSMC1 Channelized Series Channelized Multicoupler
		
Frequency Range (MHz)	118-175	148-174
Number of Channels	8, 16, 24 or 32	1, 2, 3, 4, 8 or 12
Noise Figure (typ) (dB)	3	3
Gain (typ) (dB)	8	8
Amplifier IP3 (typ) (dBm)	40	40
Attenuator Range	0-15 dB in 1 dB increments	0 to 15 dB in 1 dB increments

## OMNI ANTENNAS

Model Number	Frequency (MHz)	Bandwidth (MHz)	Type	Gain (dBd)	Vertical Beamwidth (degrees)	Isolation min. (dB)	Length, ft(m)	Radome O.D., in(cm)	Net Weight w/o bracket, lb(kg)	Shipping Weight, lb(kg)
DS4A00F36U-D	406-436	31	Single	0	60	N/A	2.8 (0.9)	2 (5.1)	5.5 (2.5)	9.6 (4.4)
DS4A03F36U-D	406-436	31	Single	3	30	N/A	5 (1.5)	3 (7.6)	8 (3.6)	18 (8.2)
DS4A06F36U-D	406-436	31	Single	6	16	N/A	11.8 (3.6)	3 (7.6)	35 (15.9)	65 (29.5)
DS4A03F36D-D	406-436	31	Dual	3	30	30	10.4 (3.2)	3 (7.6)	29 (13.2)	59 (26.8)
DS4A06F36D-D	406-436	31	Dual	6	16	30	18.3 (5.6)	3 (7.6)	47 (21.3)	77 (34.9)
DS4B00F36U-D	425-455	31	Single	0	60	N/A	2.9 (0.9)	3 (7.6)	5.5 (2.5)	15.5 (7)
DS4B03F36U-D	425-455	31	Single	3	30	N/A	5.5 (1.7)	2 (5.1)	14 (6.4)	25 (11.3)
DS4B06F36U-D	425-455	31	Single	6	16	N/A	11.8 (3.6)	3 (7.6)	35 (15.9)	65 (29.5)
DS4B03F36D-D	425-455	31	Dual	3	30	36	14 (4.3)	3 (7.6)	40 (18.1)	70 (31.8)
DS4C00F36U-D	450-482	33	Single	0	60	N/A	2.8 (0.9)	2 (5.1)	5.5 (2.5)	9.6 (4.4)
DS4C03F36U-D	450-482	33	Single	3	30	N/A	8 (2.4)	3 (7.6)	20 (9.1)	40 (18.1)
DS4C06F36U-D	450-482	33	Single	6	16	N/A	10.3 (3.1)	3 (7.6)	29 (13.2)	59 (26.8)
DS4C03F36D-D	450-482	33	Dual	3	30	36	14 (4.3)	3 (7.6)	40 (18.1)	70 (31.8)
DS4D00F36U-D	480-512	33	Single	0	60	N/A	2.8 (0.9)	2 (5.1)	5.5 (2.5)	9.6 (4.4)
DS4D03F36U-D	480-512	33	Single	3	30	N/A	6.4 (2)	3 (7.6)	16 (7.3)	26 (11.8)
DS4D06F36U-D	480-512	33	Single	6	16	N/A	10.3 (3.1)	3 (7.6)	29 (13.2)	59 (26.8)




## COMBINERS

Model	Short Haul	UHF	Hybrid Transmitter	DS4364	DB4368
					
Type	Control Station	Control Station	Transmitter	Transmit	Transmit
Frequency Range (MHz)	100-960	350-512	400-512	380-512	380-512
Frequency Separation (kHz)	No limitations	No limitations	No limitations	250	100
Number of Channels	8 or 16	4, 8, 12 or 16	2, 3 or 4	2 to 8	2 to 10
Isolation - Tx to Tx (dB)	60 min	60 min / 70 typ	70 min / 75 typ	60 min / 65 typ	65 min / 70 typ
Isolation - Ant to Tx (dB)	30 min / 35 typ	45 min / 55 typ	50 min / 55 typ	35 at 5 MHz	50 min / 55 typ
Insertion Loss - (typ)(dB)	8 ch. 33 / 16 ch. 39	4 ch. RX 9.7 / TX 8.5	4 ch. 7.5	4 ch. 4.3	4 ch. 5.1





## DUPLEXERS

Model	DSD404	DSD406	DB3626DX
			
Type	Bandpass Reject	Bandpass Reject	Window Filter
Frequency Range (MHz)	370-512	370-512	450-470
Frequency Separation (MHz)	3	3	1.5
Isolation (dB)	>80	>100	RX 80 / TX 40
Insertion Loss (typ) (dB)	0.8	1.5	RX 3.4 / TX 1.8

## TTA

Model	ATS3TMA4	ATS4TMA4-4	ATS5TMA3
			
Frequency Range (MHz)	370-400	456-460 / 466-470	470-512
Gain (typ) (dB)	14	16	16
Filter Bandwidth (MHz)	2 to 4	Single / 2 to 4	2 to 3
Noise Figure (dB)	4.5	4.5	4.5
Amplifier IP3 (typ) (dBm)	46	46	46

## FILTERS

Model	DB3777	DB3826	DB3176	DS4FRWN04
				
Type	Receive Window	Dual Receive Window	TX or RX Window	Window
Frequency Range (MHz)	370-512	450-512	370-512	450-470
Pass Bandwidth (MHz)	2 to 4	2 to 4	3 to 5	4
Isolation (dB)	>35 ± 1 MHz from band edges	>35 ± 1 MHz from band edges	45 ± 2.5 MHz from band edges	Single >60 @ ± 1 MHz Dual >25 @ ± 0.5 MHz
Insertion Loss (dB)	3.5 typ	3.5 typ	1.5	3.9 (min), 4.9 (max)

## RX MULTICOUPLERS

Model	DBMORX LC RXMC	DBSMCP RXMC with PDU
		
Frequency Range (MHz)	370-512	380-512
Number of Channels	8 or 16	8 or 16
Noise Figure (typ) (dB)	4	4 w/o adjustable attenuator
Gain (typ) (dB)	8 channel 7, 16 channel 3	8 ch. 8 / 16 ch. 4
Amplifier IP3 (typ) (dBm)	40	40
Attenuator Range	N/A	0-15 dB in 1 dB increments

## 700 MHz



## OMNI ANTENNAS

	Model Number	Frequency (MHz)	Bandwidth (MHz)	Type	Gain (dBd)	Vertical Beamwidth (degrees)	Beam Tilt (degrees)	Isolation min. (dB)	Length, ft(m)	Radome O.D., in(cm)	Net Weight w/o bracket, lb(kg)	Shipping Weight, lb(kg)
700-800 MHz Broadband	DS7D03F36U-D	746-806	61	Single	3	30		N/A	3.6 (1.1)	2 (5.1)	6.7 (3)	14 (6.4)
	DS7D06F36U-D	746-806	61	Single	6	16		N/A	7.6 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
	DS7D09F36U-D	746-806	61	Single	9	8		N/A	14.5 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7D10F36U-D	746-806	61	Single	10	6		N/A	14.4 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7A06F36U-D	746-869	124	Single	6	6	0	N/A	7.6 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
	DS7A08F36U-D	746-869	124	Single	8	8	0	N/A	10.9 (3.3)	3 (7.6)	29 (13.2)	59 (26.8)
	DS7A06F36D-D	746-869	124	Dual	6	6	0	35	11.4 (3.5)	3 (7.6)	31 (14.1)	61 (27.7)
	DS7A06F36U6D	746-869	124	Beamtilt	6	6	3 Down	N/A	7.6 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
	DS7C09F36U-D	764-869	106	Single	9	8	0	N/A	14.4 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7C10F36U-D	764-869	106	Single	10	6	0	N/A	14.4 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7C10F36U3D	764-869	106	Beamtilt	10	6	3 Down	N/A	14.4 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7C10F36U6D	764-869	106	Beamtilt	10	6	6 Down	N/A	14.4 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
	DS7B12F36U-D	764-806	43	Single	12	3	0	N/A	24.0 (7.3)	3 (7.6)	70 (31.8)	100 (45.4)
	DS7E12F36U-D	794-824	31	Single	12	3	0	N/A	24.0 (7.3)	3 (7.6)	70 (31.8)	100 (45.4)





## COMBINERS

Model	Short Haul	700 MHz	HC01100-08F Cost Effective	Hybrid Transmitter	DSCC
					
Type	Control Station	Control Station	Control Station	Transmitter	Transmit
Frequency Range (MHz)	100-960	746-806	746-806	763-776	763-776
Frequency Separation (kHz)	No limitations	No limitations	No limitations	No limitations	150
Number of Channels	8 or 16	6, 8, 12, 16, 18, 24 or 32	8	2, 3 or 4	2 to 24
Isolation - Tx to Tx (dB)	60 min	60 min / 70 typ	55 min / 60 typ	70 min / 75 typ	65 min
Isolation - Ant to Tx (dB)	30 min / 35 typ	45 min / 55 typ	45 min / 50 typ	50 min / 55 typ	50 min
Insertion Loss - (typ)(dB)	8 ch. 33 / 16 ch. 39	6 ch. RX 10.5 / TX 9.2	12	4 ch. 7.5	4 ch. 3.3


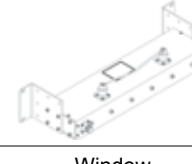

## DUPLLEXERS

Model	DP706869H	DSD706M
		
Type	Window Filter	Mobile
Frequency Range (MHz)	764-806	764-806
Frequency Separation (MHz)		30
Isolation (dB)	50 min	60
Insertion Loss (dB)	1.0 max	1.5







## TTA

Model	ATS7TMD22	ATS7TMA30	ATS7TMA8	ATS7TMA31
				
Frequency Range (MHz)	794-816	794-824	798-806	793-824
Gain (typ) (dB)	19	17	18	24
Filter Bandwidth (MHz)	22	30	8	31
Noise Figure (dB)	<2.5	<2.7	<2.5	3
Amplifier IP3 (typ) (dBm)	40	40	40	40

## FILTERS

Model	DS7830	DS7012	DS7822
			
Type	Receive	Window	Receive
Frequency Range (MHz)	793-824	794-806	794-816
Pass Bandwidth (MHz)	31	12	22
Isolation (dB)	80 @ 763-775 MHz 80 @ 851-869 MHz	80 @ 700-776 MHz 80 @ 851-900 MHz	80 @ 763-775 MHz 90 @ 851-869 MHz
Insertion Loss (dB)	1.0	1.2	0.8

## RX MULTICOUPLERS

Model	DBSMC	DBSMC1 Channelized Series	DBMORX LX	DBSMCP RXMC with PDU	NEW 2012 RXMC with PDU	DBCNRX RXMC with PDU
						
Frequency Range (MHz)	700-960	700-960	700-960	700-960	793-824	793-824
Number of Channels	8, 16, 24 or 32	1, 2, 3, 4, 8 or 12	8 or 16	8 or 16	8-expand to 16, 24 or 32	8, 16, 24 or 32
Noise Figure (typ) (dB)	1.5	3	1.5	4 (0 input attenuation)	4 (0 input attenuation)	4 (0 input attenuation)
Gain (typ) (dB)	12	8	8 ch. 10 / 16 ch. 6	8 ch. 8 / 16 ch. 4	11 (0 input attenuation)	2.5
Amplifier IP3 (typ) (dBm)	40	40	40	40	40	40
Attenuator Range	0-15 dB in 1 dB steps	0-15 dB in 1 dB steps	N/A	0-15 dB in 1 dB steps	0-15 dB in 0.5 dB steps	0-15 dB in 1 dB steps




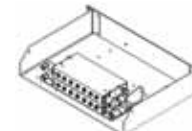
## OMNI ANTENNAS

Model Number	Frequency (MHz)	Bandwidth (MHz)	Type	Gain (dBd)	Vertical Beamwidth (degrees)	Beam Tilt (degrees)	Isolation min. (dB)	Length, ft(m)	Radome O.D., in(cm)	Net Weight w/o bracket, lb(kg)	Shipping Weight, lb(kg)
DS8A03F36U-D	806-869	64	Single	3	30	0	N/A	2.9 (0.9)	2 (5.1)	5.5 (2.5)	9.6 (4.4)
DS8A06F36U-D	806-869	64	Single	6	16	0	N/A	7.6 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
DS8A09F36U-D	806-869	64	Single	9	8	0	N/A	12.2 (3.7)	3 (7.6)	36 (16.3)	66 (29.9)
DS8A10F36U-D	806-869	64	Single	10	6	0	N/A	14.5 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)
DS8A12F36U-D	806-869	64	Single	12	3	0	N/A	22.3 (6.8)	3 (7.6)	63 (28.6)	93 (42.2)
DS8A06F36D-D	806-869	64	Dual	6	16	0	40	11.4 (3.5)	3 (7.6)	31 (14.1)	61 (27.7)
DS8A09F36D-D	806-869	64	Dual	9	8	0	40	21.2 (6.5)	3 (7.6)	52 (23.6)	82 (37.2)
DS8A06F36U3D	806-869	64	Beamtilt	6	16	3 Down	N/A	7.6 (2.3)	3 (7.6)	19 (8.6)	39 (17.7)
DS8A09F36U3D	806-869	64	Beamtilt	9	8	3 Down	N/A	11.3 (3.4)	3 (7.6)	30 (13.6)	60 (27.2)
DS8A09F36U6D	806-869	64	Beamtilt	9	8	6 Down	N/A	11.3 (3.4)	3 (7.6)	30 (13.6)	60 (27.2)
DS8A10F36U3D	806-869	64	Beamtilt	10	6	3 Down	N/A	12.9 (3.9)	3 (7.6)	38 (17.2)	68 (30.8)
DS8A10F36U6D	806-869	64	Beamtilt	10	6	6 Down	N/A	14.5 (4.4)	3 (7.6)	41 (18.6)	71 (32.2)



## COMBINERS

Model	Short Haul	800 MHz	HC01300-08F Cost Effective	Hybrid Transmitter	DSCC
					
Type	Control Station	Control Station	Control Station	Transmitter	Transmit
Frequency Range (MHz)	100-960	806-869	806-869	850-870	851-869
Frequency Separation (kHz)	No limitations	No limitations	No limitations	No limitations	150
Number of Channels	8 or 16	6, 8, 12, 16, 18, 24 or 32	8	2, 3 or 4	2 to 24
Isolation - Tx to Tx (dB)	60 min	60 min / 70 typ	55 min / 60 typ	70 min / 75 typ	65 min
Isolation - Ant to Tx (dB)	30 min / 35 typ	45 min / 55 typ	45 min / 50 typ	50 min / 55 typ	50 min
Insertion Loss - (typ)(dB)	8 ch. 33 / 16 ch. 39	6 ch. RX 10.5 / TX 10	12	4 ch. 7.5	4 ch. 3.3






## DUPLEXERS

Model	DB4090X	DP806869H	DSD806M	DSD-HC113
				
Type	Bandpass Reject	Window Filter	Mobile	Control Station Combiner
Frequency Range (MHz)	806-869	806-869	806-869	806-869
Frequency Separation (MHz)	45		45	
Isolation (dB)	65 min	RX 65 / TX 100	60	RX >90 / TX >70
Insertion Loss (dB)	0.7 max	RX 1.5 / TX 0.8	1.5	1.5 ± 0.5 dB






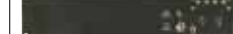
## TTA

Model	ATS8TMA18	ATS7TMA31
		
Frequency Range (MHz)	806-824	793-824
Gain (typ) (dB)	18	24
Filter Bandwidth (MHz)	18	31
Noise Figure (dB)	<2.5	3
Amplifier IP3 (typ) (dBm)	40	40

## FILTERS

Model	DS7830	DS7822	DBS4258S10WT	DB4259S18RWT	DS8018TX-WT
					
Type	Receive	Receive	Receive	Trunked Receive	Transmit
Frequency Range (MHz)	793-824	794-816	806-816	806-824	851-869
Pass Bandwidth (MHz)	31	22	10	18	18
Isolation (dB)	80 @ 763-775 MHz 80 @ 851-869 MHz	80 @ 763-775 MHz 90 @ 851-869 MHz	>42 @ 824 MHz >90 @ 851-869 MHz	>100 @ 851 MHz	>90 @ 824 MHz
Insertion Loss (dB)	1.0	0.8	<1	1.1	1.9

## RX MULTICOUPLERS

Model	DBSMC	DBSMC1 Channelized Series	DBMORX LX	DBSMCP RXMC with PDU	NEW 2012 RXMC with PDU	DBCNRX RXMC with PDU
						
Frequency Range (MHz)	700-960	700-960	700-960	700-960	793-824	793-824
Number of Channels	8, 16, 24 or 32	1, 2, 3, 4, 8 or 12	8 or 16	8 or 16	8-expand to 16, 24 or 32	8, 16, 24 or 32
Noise Figure (typ) (dB)	1.5	3	1.5	4 (0 input attenuation)	4 (0 input attenuation)	4 (0 input attenuation)
Gain (typ) (dB)	12	8	8 ch. 10 / 16 ch. 6	8 ch. 8 / 16 ch. 4	11 (0 input attenuation)	2.5
Amplifier IP3 (typ) (dBm)	40	40	40	40	40	40
Attenuator Range	0-15 dB in 1 dB steps	0-15 dB in 1 dB steps	N/A	0-15 dB in 1 dB steps	0-15 dB in 0.5 dB steps	0-15 dB in 1 dB steps



## OMNI ANTENNAS

Model Number	Frequency (MHz)	Bandwidth (MHz)	Type	Gain (dBd)	Vertical Beamwidth (degrees)	Beam Tilt (degrees)	Isolation min. (dB)	Length, ft(m)	Radome O.D., in(cm)	Net Weight w/o bracket, lb(kg)	Shipping Weight, lb(kg)
DS9A03F36U-D	890-960	71	Single	3	30	0	N/A	2.9 (0.9)	2 (5.1)	5.5 (2.5)	9.6 (4.4)
DS9A06F36U-D	890-960	71	Single	6	16	0	N/A	6.7 (2)	3 (7.6)	18 (8.2)	28 (12.7)
DS9A09F36U-D	890-960	71	Single	9	8	0	N/A	11.4 (3.5)	3 (7.6)	30 (13.6)	60 (27.2)
DS9A10F36U-D	890-960	71	Single	10	6	0	N/A	16.3 (5)	3 (7.6)	45 (20.4)	75 (34)
DS9A12F36U-D	890-960	71	Single	12	3	0	N/A	21.8 (6.6)	3 (7.6)	52 (23.6)	82 (37.2)
DS9A03F36D-D	890-960	71	Dual	3	30	0	40	5.6 (1.7)	3 (7.6)	8.5 (3.9)	18.5 (8.4)
DS9A06F36D-D	890-960	71	Dual	6	16	0	40	11.4 (3.5)	3 (7.6)	31 (14.1)	61 (27.7)
DS9A09F36D-D	890-960	71	Dual	9	8	0	45	19.2 (5.9)	3 (7.6)	50 (22.7)	80 (36.3)
DS9A06F36U3D	890-960	71	Beamtilt	6	16	3 Down	N/A	6.7 (2)	3 (7.6)	18 (8.2)	28 (12.7)
DS9A06F36U6D	890-960	71	Beamtilt	6	16	6 Down	N/A	6.7 (2)	3 (7.6)	18 (8.2)	28 (12.7)
DS9A09F36U3D	890-960	71	Beamtilt	9	8	3 Down	N/A	11.4 (3.5)	3 (7.6)	30 (13.6)	60 (27.2)
DS9A09F36U6D	890-960	71	Beamtilt	9	8	6 Down	N/A	11.4 (3.5)	3 (7.6)	30 (13.6)	60 (27.2)
DS9A10F36U3D	890-960	71	Beamtilt	10	6	3 Down	N/A	16.3 (5)	3 (7.6)	45 (20.4)	75 (34)
DS9A10F36U6D	890-960	71	Beamtilt	10	6	6 Down	N/A	16.3 (5)	3 (7.6)	45 (20.4)	75 (34)


## COMBINERS

Model	Short Haul	900 MHz	HC01200-08F Cost Effective	Hybrid Transmitter	DSCC
					
Type	Control Station	Control Station	Control Station	Transmitter	Transmit
Frequency Range (MHz)	100-960	896-960	896-960	850-960	935-940
Frequency Separation (kHz)	No limitations	No limitations	No limitations	No limitations	150
Number of Channels	8 or 16	6, 8, 12, 16, 18, 24 or 32	8	2, 3 or 4	2 to 24
Isolation - Tx to Tx (dB)	60 min	60 min / 70 typ	55 min / 60 typ	70 min / 75 typ	65 min
Isolation - Ant to Tx (dB)	30 min / 35 typ	45 min / 55 typ	45 min / 50 typ	50 min / 55 typ	50 min
Insertion Loss - (typ)(dB)	8 ch. 33 / 16 ch. 39	6 ch. RX 10.5 / TX 9.5	12	4 ch. 7.5	4 ch. 3.3

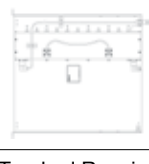
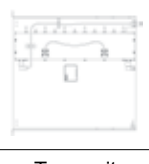
## DUPLEXERS

Model	DP906869H	DSD906M
		
Type	Window Filter	Mobile
Frequency Range (MHz)	896-940	896-940
Frequency Separation (MHz)		34
Isolation (dB)	RX: 50, TX: 85	60
Insertion Loss (typ) (dB)	1.5	1.5




## TTA

Model	ATS9TMA5
	
Frequency Range (MHz)	896-901
Gain (typ) (dB)	19
Filter Bandwidth (MHz)	5
Noise Figure (dB)	<2.5
Amplifier IP3 (typ) (dBm)	40

## FILTERS

Model	DS906WT	DS9005-WT
		
Type	Trunked Receive	Transmit
Frequency Range (MHz)	896-901	935-940
Pass Bandwidth (MHz)	5	5
Isolation (dB)	85 @ 935 MHz	90 @ 901 MHz
Insertion Loss (dB)	1.5	2.8

## RX MULTICOUPLERS

Model	DBSMC	DBSMC1 Channelized Series	DBMORX LX	DBSMCP RXMC with PDU
				
Frequency Range (MHz)	700-960	700-960	700-960	700-960
Number of Channels	8, 16, 24 or 32	1, 2, 3, 4, 8 or 12	8 or 16	8 or 16
Noise Figure (typ) (dB)	1.5	3	1.5	4 (0 input attenuation)
Gain (typ) (dB)	12	8	8 ch. 10 / 16 ch. 6	8 ch. 8 / 16 ch. 4
Amplifier IP3 (typ) (dBm)	40	40	40	40
Attenuator Range	0-15 dB in 1 dB steps	0-15 dB in 1 dB steps	N/A	0-15 dB in 1 dB steps



[www.dbspectra.com](http://www.dbspectra.com)

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