



TX-equipment for VHF band 140-174 MHz

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Model	Equipment description	Input power, W	Isolation TX-TX, MHz	Insertion loss TX-ANT, dB	Band, MHz
CH-2V-50S-R/2	Hybrid transmitter 2-channel combiner, is. 65 dB, "regular"	50	not limited	3,6	140-174
CH-2V-50S-X/2	Hybrid transmitter 2-channel combiner, is. 65 dB, "extreme"	50	not limited	3.5	140-174
CH-2V-50D-R/2	Hybrid transmitter 2-channel combiner, is. 100 dB, "regular"	50	not limited	3.9	140-174
CH-2V-50D-X/2	Hybrid transmitter 2-channel combiner, is. 100 dB, "extreme"	50	not limited	3,9	140-174
CH-2V-125S-R/2	Hybrid transmitter 2-channel combiner, is. 65 dB, "regular"	125	not limited	3,5	140-174
CH-2V-125S-X/2	Hybrid transmitter 2-channel combiner, is. 65 dB, "extreme"	125	not limited	3,5	140-174
CH-2V-125D-R/2	Hybrid transmitter 2-channel combiner, is. 100 dB, "regular"	125	not limited	3,9	140-174
CH-2V-125D-X/2	Hybrid transmitter 2-channel combiner, is. 100 dB, "extreme"	125	not limited	3,9	140-174
CH-3V-50S-R/2	Hybrid transmitter 3-channel combiner, is. 60 dB, "regular"	50	not limited	5,5	140-174
CH-3V-50S-X/2	Hybrid transmitter 3-channel combiner, is. 60 dB, "extreme"	50	not limited	5,5	140-174
CH-3V-50D-R/2	Hybrid transmitter 3-channel combiner, is. 90 dB, "regular"	50	not limited	5,9	140-174
CH-3V-50D-X/2	Hybrid transmitter 3-channel combiner, is. 90 dB, "extreme"	50	not limited	5,9	140-174
CH-4V-50S-R/2	Hybrid transmitter 4-channel combiner, is. 65 dB, "regular"	50	not limited	6,8	140-174
CH-4V-50S-X/2	Hybrid transmitter 4-channel combiner, is. 65 dB, "extreme"	50	not limited	6,8	140-174
CH-4V-50D-R/2	Hybrid transmitter 4-channel combiner, is. 100 dB, "regular"	50	not limited	7,2	140-174
CH-4V-50D-X/2	Hybrid transmitter 4-channel combiner, is. 100 dB, "extreme"	50	not limited	7,2	140-174
CH-5V-50S-R/2	Hybrid transmitter 5-channel combiner, is. 60 dB, "regular"	50	not limited	7,4	140-174
CH-5V-50S-X/2	Hybrid transmitter 5-channel combiner, is. 60 dB, "extreme"	50	not limited	7,4	140-174
CH-5V-50D-R/2	Hybrid transmitter 5-channel combiner, is. 90 dB, "regular"	50	not limited	7,8	140-174
CH-5V-50D-X/2	Hybrid transmitter 5-channel combiner, is. 90 dB, "extreme"	50	not limited	7,8	140-174
CH-4V-125S-R/2	Hybrid transmitter 4-channel combiner, is. 65 dB, "regular"	125	not limited	6,8	140-174
CH-4V-125S-X/2	Hybrid transmitter 4-channel combiner, is. 65 dB, "extreme"	125	not limited	6,8	140-174
CH-4V-125D-R/2	Hybrid transmitter 4-channel combiner, is. 100 dB, "regular"	125	not limited	7,2	140-174
CH-4V-125D-X/2	Hybrid transmitter 4-channel combiner, is. 100 dB, "extreme"	125	not limited	7,2	140-174
CL8-2V-50-R/2	2-channel low loss combiner, "regular"	50	0,125	2,8	140-174
CL8-2V-50-X/2	2-channel low loss combiner, "extreme"	50	0,125	2.8	140-174
CL8-4V-50-R/2	4-channel low loss combiner, "regular"	50	0,125	3,2	140-174
CL8-4V-50-X/2	4-channel low loss combiner, "extreme"	50	0,125	3.2	140-174
CL8-6V-50-R/2	6-channel low loss combiner, "regular"	50	0,125	3,5	140-174
CL8-6V-50-X/2	6-channel low loss combiner, "extreme"	50	0,125	3.5	140-174
CL8-8V-50-R/2	8-channel low loss combiner, "regular"	50	0,125	3,8	140-174
CL8-8V-50-X/2	8-channel low loss combiner, "extreme"	50	0,125	3.8	140-174
CL8-2V-125-R/2	2-channel low loss combiner, "regular"	125	0,125	2,8	140-174
CL8-2V-125-X/2	2-channel low loss combiner, "extreme"	125	0,125	2.8	140-174
CL8-4V-125-R/2	4-channel low loss combiner, "regular"	125	0,125	3,2	140-174
CL8-4V-125-X/2	4-channel low loss combiner, "extreme"	125	0,125	3.2	140-174
CL8-6V-125-R/2	6-channel low loss combiner, "regular"	125	0,125	3,5	140-174

CL8-6V-125-X/2	6-channel low loss combiner, "extreme"	125	0,125	3.5	140-174
CL8-8V-125-R/2	8-channel low loss combiner, "regular"	125	0,125	3,8	140-174
CL8-8V-125-X/2	8-channel low loss combiner, "extreme"	125	0,125	3.8	140-174
CL8-2V-300	2-channel low loss combiner	300	0,125	2,8	140-174
CL8-3V-300	3-channel low loss combiner	300	0,125	3	140-174
CL10-2V-50-R/2	2-channel low loss combiner, "regular"	50	0,1	2,6	140-174
CL10-2V-50-X/2	2-channel low loss combiner, "extreme"	50	0,1	2.6	140-174
CL10-4V-50-R/2	4-channel low loss combiner, "regular"	50	0,1	3.2	140-174
CL10-4V-50-X/2	4-channel low loss combiner, "extreme"	50	0,1	3.2	140-174
CL10-6V-50-R/2	6-channel low loss combiner, "regular"	50	0,1	3.4	140-174
CL10-6V-50-X/2	6-channel low loss combiner, "extreme"	50	0,1	3.4	140-174
CL10-8V-50-R/2	8-channel low loss combiner, "regular"	50	0,1	3.6	140-174
CL10-8V-50-X/2	8-channel low loss combiner, "extreme"	50	0,1	3.6	140-174
CL10-2V-125-R/2	2-channel low loss combiner, "regular"	125	0,1	2,6	140-174
CL10-2V-125-X/2	2-channel low loss combiner, "extreme"	125	0,1	2.6	140-174
CL10-4V-125-R/2	4-channel low loss combiner, "regular"	125	0,1	3.2	140-174
CL10-4V-125-X/2	4-channel low loss combiner, "extreme"	125	0,1	3.2	140-174
CL10-6V-125-R/2	6-channel low loss combiner, "regular"	125	0,1	3.4	140-174
CL10-6V-125-X/2	6-channel low loss combiner, "extreme"	125	0,1	3.4	140-174
CL10-8V-125-R/2	8-channel low loss combiner, "regular"	125	0,1	3.6	140-174
CL10-8V-125-X/2	8-channel low loss combiner, "extreme"	125	0,1	3.6	140-174
CL12-2V-50-R/2	2-channel low loss combiner, "regular"	50	0,075	2,5	140-174
CL12-2V-50-X/2	2-channel low loss combiner, "extreme"	50	0,075	2.5	140-174
CL12-4V-50-R/2	4-channel low loss combiner, "regular"	50	0,075	2,8	140-174
CL12-4V-50-X/2	4-channel low loss combiner, "extreme"	50	0,075	2.8	140-174
CL12-6V-50-R/2	6-channel low loss combiner, "regular"	50	0,075	3.0	140-174
CL12-6V-50-X/2	6-channel low loss combiner, "extreme"	50	0,075	3.0	140-174
CL12-8V-50-R/2	8-channel low loss combiner, "regular"	50	0,075	3,2	140-174
CL12-8V-50-X/2	8-channel low loss combiner, "extreme"	50	0,075	3.2	140-174
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CL12-2V-125-X/2	2-channel low loss combiner, "extreme"	125	0,075	2.5	140-174
CL12-4V-125-R/2	4-channel low loss combiner, "regular"	125	0,075	2.8	140-174
CL12-4V-125-X/2	4-channel low loss combiner, "extreme"	125	0,075	2.8	140-174
CL12-6V-125-R/2	6-channel low loss combiner, "regular"	125	0,075	3.0	140-174
CL12-6V-125-X/2	6-channel low loss combiner, "extreme"	125	0,075	3.0	140-174
IF-1V(L,M,H)-50R/2	Single isolator, regular, is.27 dB	50	-	0.4	140-154 148-163 158-174
IF-2V(L,M,H)-50R/2	Dual isolator, regular, is.55 dB	50	-	0,8	140-154 148-163 158-174
IF-1V(L,M,H)-125R/2	Single isolator, regular, is. 27 dB	125	-	0,4	140-154 148-163 158-174
IF-2V(L,M,H)-125R/2	Dual isolator, regular, is.55 dB	125	-	0,8	140-154 148-163 158-174
IF-1V(L,M,H)-50X/2	Single isolator, extreme, is. 27 dB	50	-	0,4	140-154 148-163 158-174
IF-2V(L,M,H)-50X/2	Dual isolator, extreme, is. 55 dB	50	-	0,8	140-154 148-163 158-174
IF-1V(L,M,H)-125X/2	Single isolator, extreme, is. 27 dB	125	-	0,4	140-154 148-163 158-174
IF-2V(L,M,H)-125X/2	Dual isolator, extreme, is.55 dB	125	-	0,8	140-154 148-163 158-174
IMF8-1V-50S-R/2	Intermodulations filter: narrow bandwidth diam.8", single isolator, "regular"	50	-	0,9	140-174
IMF8-1V-50S-X/2	Intermodulations filter: narrow bandwidth diam.8", single isolator, "extreme"	50	-	0,9	140-174
IMF8-1V-50D-R/2	Intermodulations filter: narrow bandwidth diam. 8", dual isolator, "regular"	50	-	1,3	140-174
IMF8-1V-50D-X/2	Intermodulations filter: narrow bandwidth diam. 8", dual isolator, "extreme"	50	-	1,3	140-174

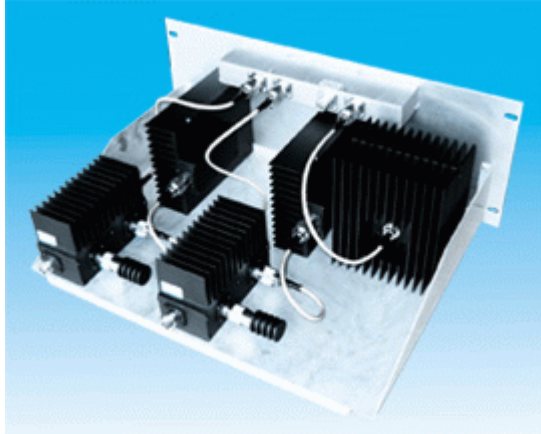
IMF10-1V-50S-R/2	Intermodulations filter: narrow bandwidth diam.10", single isolator, "regular"	50	-	0,9	140-174
IMF10-1V-50S-X/2	Intermodulations filter: narrow bandwidth diam. 10", single isolator, "extreme"	50	-	0,9	140-174
IMF10-1V-50D-R/2	Intermodulations filter: narrow bandwidth diam.10", dual isolator, "regular"	50	-	1,3	140-174
IMF10-1V-50D-X/2	Intermodulations filter: narrow bandwidth diam.10", dual isolator, "extreme"	50	-	1,3	140-174
IMF10-1V-125S-R/2	Intermodulations filter: narrow bandwidth diam.10", single isolator, "regular"	125	-	0,9	140-174
IMF10-1V-125S-X/2	Intermodulations filter: narrow bandwidth diam. 10", single isolator, "extreme"	125	-	0,9	140-174
IMF10-1V-125D-R/2	Intermodulations filter: narrow bandwidth diam.10", dual isolator, "regular"	125	-	1,3	140-174
IMF10-1V-125D-X/2	Intermodulations filter: narrow bandwidth diam.10", dual isolator, "extreme"	125	-	1,3	140-174
IMF10-1V-300S	Intermodulations filter: narrow bandwidth diam.10", single isolator	300	-	0,9	140-174
IMF10-1V-300D	Intermodulations filter: narrow bandwidth diam. 10", dual isolator	300	-	1,3	140-174



140-174 MHz
Hybrid transmitter combiners
CH-2V-50S(D)-R/2(X/2),
CH-4V-50S(D)-R/2(X/2), CH-2V-
125S(D)-R/2(X/2), CH-4V-125S
(D)-R/2(X/2)

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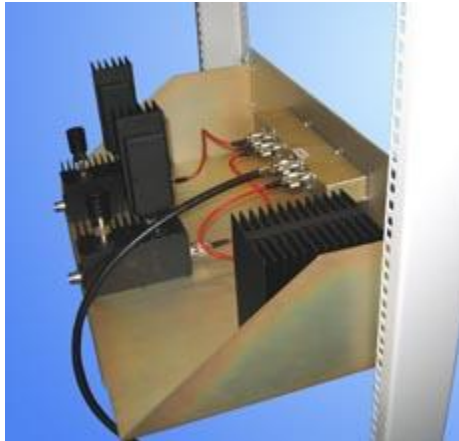
CH-2V-125D-X/2



CH-3V-125D-R/2



CH-2V-125D-R/2



CH-2V-50-X/2



Electrical specifications

All model: Operating frequency band 140-174 MHz, Max. frequency bandwidth - 7 MHz, Impedance 50 Ohm, Connector N-female

Model	NO of channels	Insertion loss TX-ANT, dB	Isolation TX-TX not less, dB	Isolation ANT-TX not less, dB	Power not more, W	Weight, kg	Length/Width/Depth, mm
CH-2V-50S-R/2(X/2)	2	3,6	60	33	50	3,12	485x88x350
CH-2V-50D-R/2(X/2)	2	4	90	63	50	3,36	485x88x350
CH-4V-50S-R/2(X/2)	4	6,8	60	36	50	6,6	485x175x350
CH-4V-50D-R/2(X/2)	4	7,2	90	66	50	7,1	485x175x350
CH-2V-125S-R/2(X/2)	2	3,6	60	33	125	4,9	485x88x350
CH-2V-125D-R/2(X/2)	2	4	90	63	125	5,4	485x88x350
CH-4V-125S-R/2(X/2)	4	6,8	60	36	125	11,2	485x350x350
CH-4V-125D-R/2(X/2)	4	7,2	90	66	125	12,3	485x350x350

These hybrid transmitter combiners are convenient for use in systems with any frequency separation. Also, thanks to absence of narrow resonant elements in their structure, they have no need in heat stabilizing, enabling to install them directly "under antennas".

Two or four-channel single-isolator transmitter combiners employment is allowable at installation sites with low density of transmitting devices.

It is suggested to use double isolator transmitter combiners (CH-2V-50/125D and CH-4V-50/125D), which provide higher

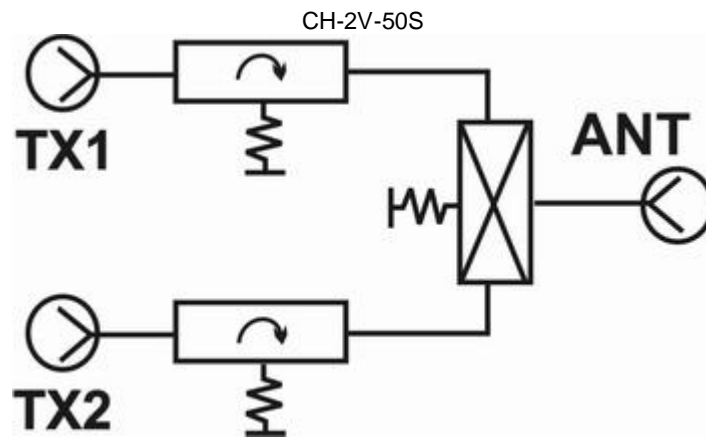
protection from broadcast signals, as well as from signals of transmitters, operating on different channels, if other companies' antennas are situated near yours.

Do not forget to install output bandpass filter, intended for passing all combined channels and elimination of transmitters noise.

Hybrid transmitter combiners are designed for mounting in standard 19-inch rack.

Manufacturer adjusts transmitter combiner to customers operating frequencies.

The combiners of Regular (R) class provide an operation of the transmitting link in temporal regime of exploitation with TX/RX =1:5, i.e. when the working load onto the transmitters of your system is not high. The combiners of Extreme (X) class are being applied in the case when repeaters operate with enhanced load (up to 100% of the cycle). These are more expensive and highly reliable products with the valves based upon the radiators (which do not allow the ferrites to become overheated) and for massive carrying out (external) loads.

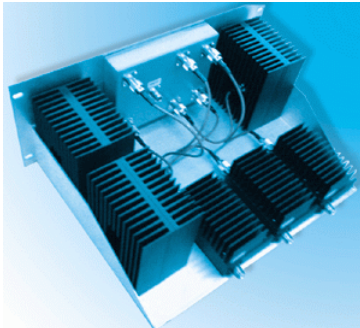




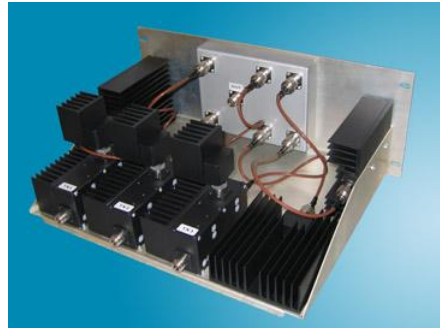
140-174, 400-490 MHz Hybrid transmitter combiners CH-3V-50S/D-R/2(X/2), CH-5V-50S/D-R/2(X/2), CH-3U- 50S/D-R/2(X/2), CH-5U-50S/D- R/2(X/2)

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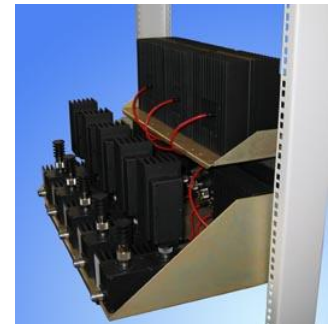
CH-3V-50D-R/2



CH-3U-50D-X/2



CH-5V-125D-R/2



Electrical specifications

Model	CH-3V-50S/D-R/2(X/2)	CH-3U-50S/D-R/2(X/2)	CH-5V-50S/D-R/2(X/2)	CH-5U-50S/D-R/2(X/2)
Operating frequency band, MHz	140-174	400-490	140-174	400-490
Operating bandwidth, MHz	7	14	7	14
Impedance, Ohm	50	50	50	50
Number of channels	3	3	5	5
Insertion loss TX-ANT, dB	5,5/5,9	5,5/5,9	7,4/7,8	7,5/7,9
Isolation TX-TX not less, dB			60/90	
Isolation ANT-TX not less, dB			35/65	
Power not more, W			50	
Frequency separation TX/TX			not limited	

Mechanical specifications

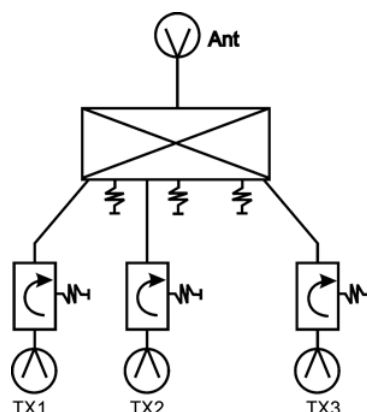
Model	CH-3V-50S/D-R/2(X/2)	CH-3U-50S/D-R/2(X/2)	CH-5V-50S/D-R/2(X/2)	CH-5U-50S/D-R/2(X/2)
Weight, kg	4,83/5,18	4,83/5,18	7,8/8,9	7,8/8,9
Length/Width/Depth, mm	485x88x350		485x233x350	
Connectors	N-type			

The specialists of our company have developed new models of hybrid combiners for 3 transmitters. Their principle peculiarity consists in the equal losses for all channels.

Hybrid transmitter combiners are designed for mounting in standard 19-inch rack.

Manufacturer adjusts transmitter combiner to customers operating frequencies.

The combiners of Regular (R) class provide an operation of the transmitting link in temporal regime of exploitation with TX/RX =1:5, i.e. when the working load onto the transmitters of your system is not high. The combiners of Extreme (X) class are being applied in the case when repeaters operate with enhanced load (up to 100% of the cycle). These are more expensive and highly reliable products with the valves based upon the radiators (which do not allow the ferrites to become overheated) and for massive carrying out (external) loads.





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140-174 MHz Low-loss transmitter combiners

CL8-4V-50X/2



CL10-8V-125X/2



CL10-4V-50X/2



Electrical specifications

Model	Min. space TX/TX, kHz	Insertion loss @ min. space, dB	Input power, W	Cavity electrical length	Diameter of cavity, mm (ins.)	Weight without rack, kg	Mount to rack
CL8-2V-50-R/2(X/2)	125	2,8	50	1/4λ	8	8,15	19"
CL8-4V-50-R/2(X/2)	125	3,2	50	1/4λ	8	15,7	19"
CL8-6V-50-R/2(X/2)	125	3,5	50	1/4λ	8	23,9	ready
CL8-8V-50-R/2(X/2)	125	3,8	50	1/4λ	8	31,4	ready
CL8-2V-125-R/2(X/2)	125	2,8	125	1/4λ	8	9,6	19"
CL8-4V-125-R/2(X/2)	125	3,2	125	1/4λ	8	18,3	19"
CL8-6V-125-R/2(X/2)	125	3,5	125	1/4λ	8	28	ready
CL8-8V-125-R/2(X/2)	125	3,8	125	1/4λ	8	36,5	ready
CL8-2V-300	125	2,8	300	1/4λ	8	11	19"
CL8-3V-300	125	3	300	1/4λ	8	16,3	19"
CL10-2V-50-R/2(X/2)	100	2,6	50	1/4λ	10	9,5	ready
CL10-4V-50-R/2(X/2)	100	2,8	50	1/4λ	10	18,3	ready

CL10-6V-50-R/2(X/2)	100	3,4	50	1/4λ	10	27,8	ready
CL10-8V-50-R/2(X/2)	100	3,6	50	1/4λ	10	36,5	ready
CL10-2V-125-R/2(X/2)	100	2,6	125	1/4λ	10	11	ready
CL10-4V-125-R/2(X/2)	100	3,2	125	1/4λ	10	20,9	ready
CL10-6V-125-R/2(X/2)	100	3,4	125	1/4λ	10	31,6	ready
CL10-8V-125-R/2(X/2)	100	3,6	125	1/4λ	10	41,7	ready
CL12-2V-50-R/2(X/2)	75	2,5	50	1/4λ	12	17	on floor
CL12-4V-50-R/2(X/2)	75	2,8	50	1/4λ	12	34,2	on floor
CL12-6V-50-R/2(X/2)	75	3	50	1/4λ	12	52,8	on floor
CL12-8V-50-R/2(X/2)	75	3,2	50	1/4λ	12	70	on floor

One should not let go an opportunity to implement cavity transmitter combiners, if frequency separation enables this. This will considerably save radio signal energy, which will be spent in antenna, not in ballast load. Besides, cavities will provide high emission spectrum clearance of your transmitters, reduce noise and spurious radiation, influencing favourably on the air on the whole.

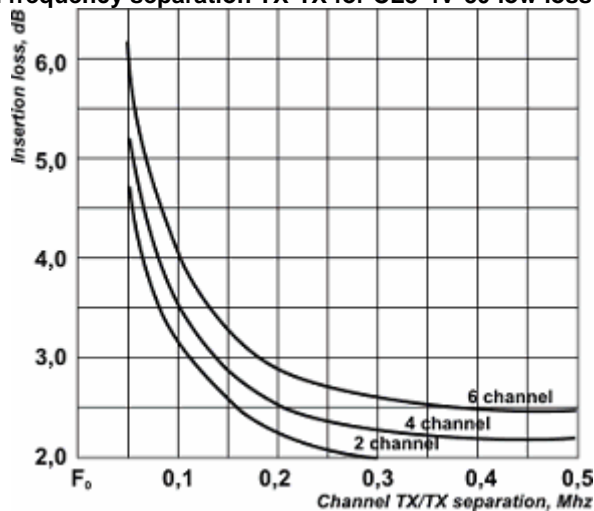
Transmitter combiners modular design enables to add additional channels or units for system expansion practically without any insertion loss.

Using high-Q cavities and managing insertion loss, we achieve extremely low power loss of signal combining. Complete range of various design cavities and ferrite isolators for various throughputs offers you an opportunity to select transmitter combiner with the best price/loss ratio, planing any antenna-feeder equipment configuration.

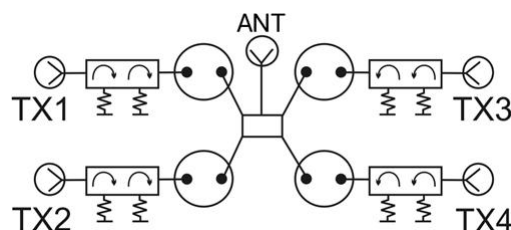
Submit our engineers with information about frequency plan, power input and output and possible antennas layout and they will help you to determine which transmitter combiner to select.

The combiners of Regular (R) class provide an operation of the transmitting link in temporal regime of exploitation with TX/RX =1:5, i.e. when the working load onto the transmitters of your system is not high. The combiners of Extreme (X) class are being applied in the case when repeaters operate with enhanced load (up to 100% of the cycle). These are more expensive and highly reliable products with the valves based upon the radiators (which do not allow the ferrites to become overheated) and for massive carrying out (external) loads.

Dependence of loss on frequency separation TX-TX for CL8-4V-50 low loss transmitters combiners



Low loss transmitter combiner CL8-4V-50 electric diagram





**140-154, 148-163, 158-174 MHz
Isolators "regular"
IF-1(2)VL-50(125)R/2, IF-1(2)VM-
50(125)R/2, IF-1(2)VH-50(125)R/2**

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IF-1V-50R/2 and IF-2V-50R/2



IF-1V-125R/2



IF-2V-125R/2



Electrical specifications

Model	IF-1VL(VM,VH)-50R/2	IF-2VL(VM,VH)-50R/2	IF-1VL(VM,VH)-125R/2	IF-2VL(VM,VH)-125R/2
Operating frequency band, MHz	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174
Insertion loss not more, dB	0.4	0.8	0.4	0.8
Isolation TX-TX not less, dB	27	55	27	55
Impedance, Ohm	50	50	50	50
VSWR, not more than	1.2	1.2	1.2	1,2
Input power not more than, W	50	50	125	125
Temperature range, °C	from -30 to +50	from -30 to +50	from -30 to +50	from -30 to +50

Mechanical specifications

Model	IF-1VL(VM,VH)-50R/2	IF-2VL(VM,VH)-50R/2	IF-1VL(VM,VH)-125R/2	IF-2VL(VM,VH)-125R/2
Weight, kg	0.25	0.49	0.93	1.45
Connectors	N-female	N-female	N-female	N-female
Length/Width/Depth , mm	102x45x63	165x45x63	203x87x107	210x90x165



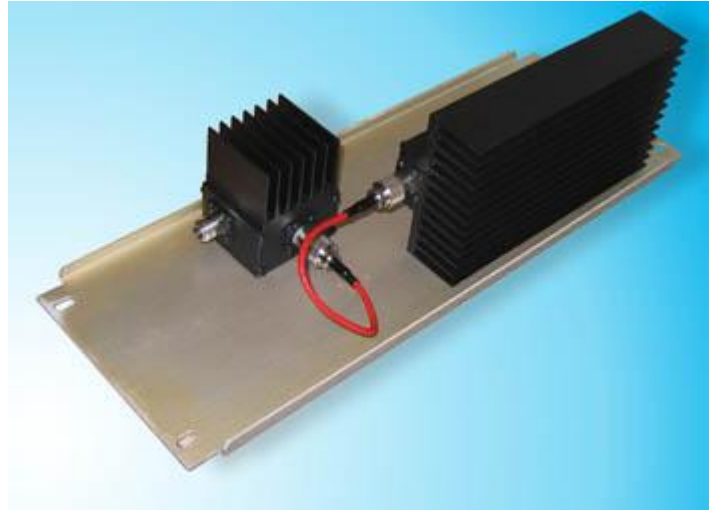
**140-154, 148-163, 158-174 MHz
Isolators "extreme"
IF-1(2)VL-50(125)X/2, IF-1(2)VM-
50(125)X/2, IF-1(2)VH-50(125)X/2**

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru

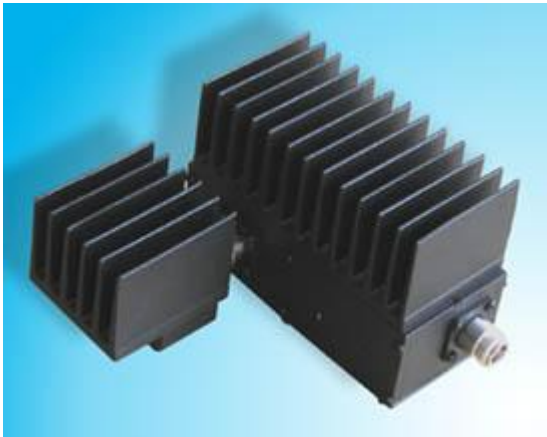
IF-1V-50X/2



IF-1V-125X/2



IF-2V-50X/2



IF-2V-125X/2



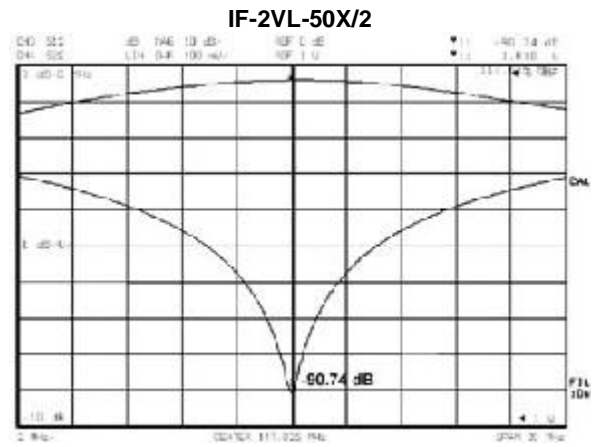
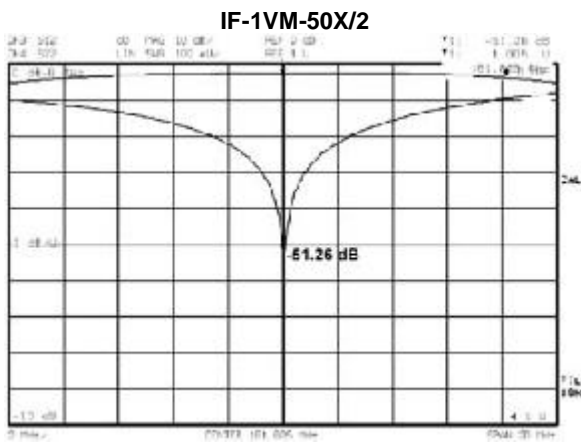
Electrical specifications

Model	IF-1VL(VM,VH)-50X/2	IF-2VL(VM,VH)-50X/2	IF-1VL(VM,VH)-125X/2	IF-2VL(VM,VH)-125X/2
Operating frequency band, MHz	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174	VL 140-154 VM 148-163 VH 158-174
Insertion loss not more, dB	0.4	0.8	0.4	0.8
Isolation TX-TX not less, dB	27	55	27	55
Impedance, Ohm	50	50	50	50
VSWR, not more than	1.2	1.2	1.2	1,2
Input power not more than, W	50	50	125	125
Temperature range, °C	from -30 to +50	from -30 to +50	from -30 to +50	from -30 to +50

Mechanical specifications

Model	IF-1VL(VM,VH)-50X/2	IF-2VL(VM,VH)-50X/2	IF-1VL(VM,VH)-125X/2	IF-2VL(VM,VH)-125X/2
Weight, kg	0.48	1.07	1.95	2.35
Connectors	N-female	N-female	N-female	N-female
Length/Width/Depth, mm	125x70x102	150x90x168	480x178x122	480x178x122

Typical isolator characteristics





140-174 MHz Intermodulations filters IMF8- 1V-50S-R/2(X/2), IMF8-1V-50D-R/2(X/2)

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Electrical specifications

Model	IMF8-1V-50S-R/2(X/2)	IMF8-1V-50D-R/2(X/2)
Operating frequency band	140-174 MHz	
Insertion loss, dB	0,9	1,3
Impedance, Ohm	50	
Attenuation	see fig.	
VSWR, not more than	1,5	
Input power, W	50	
Isolation ANT-TX not worse, dB	30	75

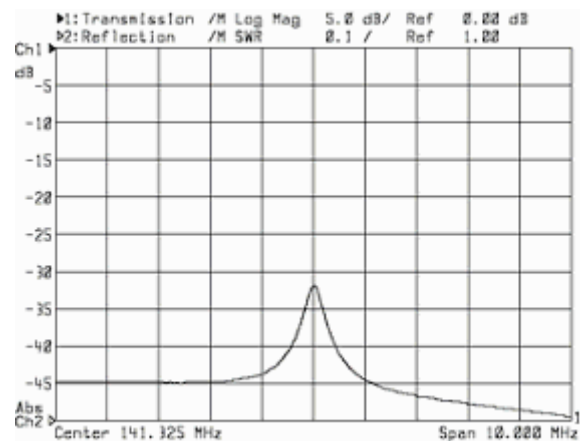
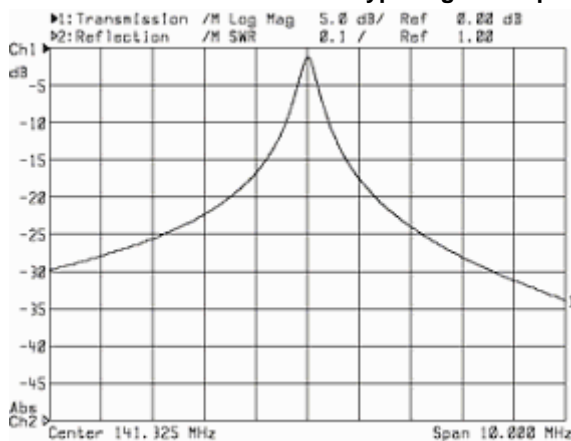
Mechanical specifications

Model	IMF8-1V-50S-R/2(X/2)	IMF8-1V-50D-R/2(X/2)
Diameter of cavity, mm (ins.)	206 (8")	
Weight, kg	3,6	3,75
Temperature Range, °C	-30 to +50	
Connector	N-female, 7/16 DIN (optional)	

Intermodulation filter IMF8-1V-50S-R/2(X/2), installed in transmitting section, will provide low loss signal passage, attenuate out-of-band transmitters radiation, preventing signals induced to antenna from penetration to transmitter output stage. Single isolator in this filter can be used, when distance between neighboring antennas does not exceed 10λ across or exceed 2λ at coaxial vertical arrangement of antennas. For short distances IMF8-1V-50D with double isolator must be used.

The ferrite isolators of Regular (R) class provide an operation of the intermodulations filters or transmitting link in temporal regime of exploitation with TX/RX = 1:5, i.e. when the working load onto the transmitters of your system is not high. The ferrite valves of Extreme (X) class are being applied in the case when repeaters operate with enhanced load (up to 100% of the cycle). These are more expensive and highly reliable products with the valves based upon the radiators (which do not allow the ferrites to become overheated) and for massive carrying out (external) loads.

Typical gain-frequency characteristics IMF8-1V-50S





140-174 MHz Intermodulations filters IMF10- 1V-50S(D), IMF10-1V-125S(D), IMF10-1V-300S(D)

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Electrical specifications

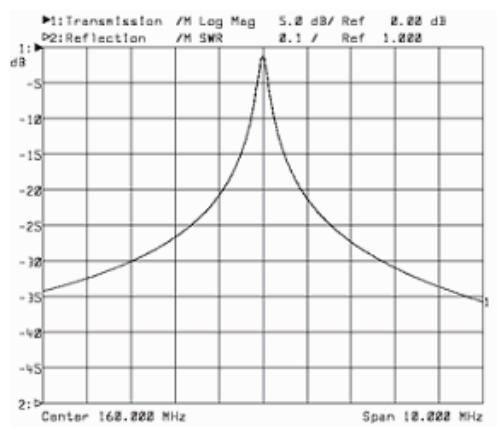
Model	Insertion loss, dB	Input power, W	Isolation ANT-TX not worse, dB	Diameter of cavity, mm (ins.)	Mass, kg	Temperature Range, °C
IMF10-1V-50S-R/2(X/2)	0.9	50	30	257 (10")	4.2	-30 to +50
IMF10-1V-50D-R/2(X/2)	1.3	50	75		4.35	
IMF10-1V-125S-R/2(X/2)	0.9	125	30		4.7	
IMF10-1V-125D-R/2(X/2)	1.3	125	75		4.9	
IMF10-1V-300S	0.9	300	30		4.85	
IMF10-1V-300D	1.3	300	75		5.7	

Intermodulation filter IMF10-1V-50S-R/2(X/2), installed in transmitting section, will provide low loss signal passage, attenuate out-of-band transmitters radiation, prevent signals induced to antenna from penetration to transmitter output stage. Application of 10" cavity filter will provide the best out-of-band radiation attenuation and increase isolation of your antenna-feeder system from neighboring transmitters. Installation of single isolator is permitted subject to distance to neighboring antennas makes up 10 λ (across) or 2 λ (in vertical). For shorter distances IMF10-1V-50D-R/2(X/2) with double isolator should be used.

The ferrite isolators of Regular (R) class provide an operation of the intermodulations filters or transmitting link in temporal regime of exploitation with TX/RX = 1:5, i.e. when the working load onto the transmitters of your system is not high. The ferrite valves of Extreme (X) class are being applied in the case when repeaters operate with enhanced load (up to 100% of the cycle). These are more expensive and highly reliable products with the valves based upon the radiators (which do not allow the ferrites to become overheated) and for massive carrying out (external) loads.

Typical gain-frequency characteristics

filter PF10-1V



isolator IF-2V-125

