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TX-equipment 300-360 MHz

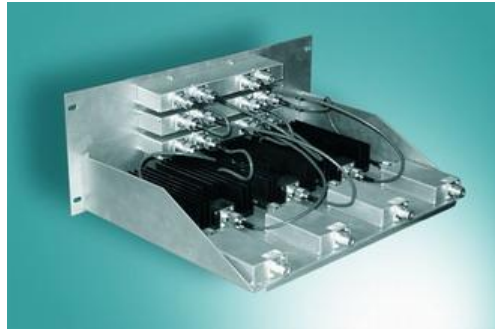
Model	Short description	Input power, W	Isolation, MHz	Insertion loss TX-ANT, dB	Band, MHz
CH-2A-50S	2-channel hybrid transmitter combiner, is. 65 dB	50	not limited	3.8	300-360
CH-2A-50D	2-channel hybrid transmitter combiner, is. 100 dB	50	not limited	4.2	300-360
CH-4A-50S	4-channel hybrid transmitter combiner, is. 65 dB	50	not limited	7.0	300-360
CH-4A-50D	4-channel hybrid transmitter combiner, is. 100 dB	50	not limited	7.4	300-360
CL10-2A-50	2-channel low loss combiner	50	0,2	3,2	300-360
CL10-4A-50	4-channel low loss combiner	50	0,2	3,6	300-360
CL10-6A-50	6-channel low loss combiner	50	0,2	3,9	300-360
CL10-8A-50	8-channel low loss combiner	50	0,2	4,2	300-360
TETRA-4A	4-channel low loss combiner	50	0,125	3,6	300-360
TETRA-8A	8channel low loss combiner	50	0,125	4,5	300-360

2009



300-360 MHz Hybrid transmitter combiners CH-2A-50S, CH-2A-50D, CH-4A- 50S, CH-4A-50D

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Electrical specifications

Model	CH-2A-50S	CH-2A-50D	CH-4A-50S	CH-4A-50D
Operating frequency band, MHz			300-360	
Operating bandwidth, MHz			14	
Impedance, Ohm			50	
Number of channels		2		4
Insertion loss TX-ANT, dB	3,8	4,2	7	7,4
Isolation TX-TX not less, dB	60	90	60	90
Isolation ANT-TX not less, dB	33	63	36	66
Power not more, W			50	
Frequency separation TX/TX			not limited	

Mechanical specifications

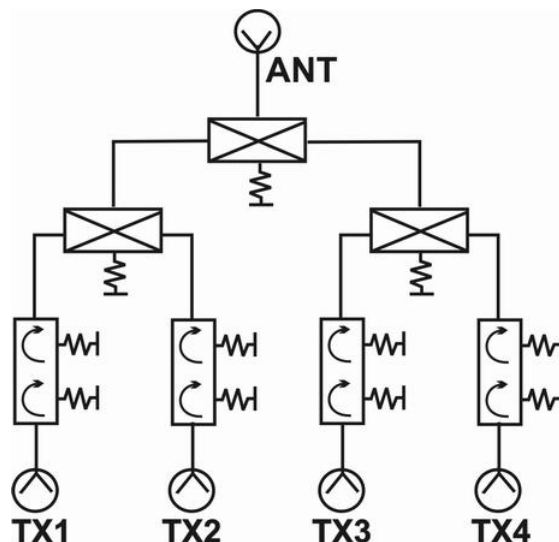
Model	CH-2A-50S	CH-2A-50D	CH-4A-50S	CH-4A-50D
Weight, kg	3,12	3,36	6,6	7,1
Length/Width/Depth, mm		485x88x350		485x175x350
Connectors			N-type	

300 MHz frequency range was always noted for its specificity, for exact 25 kHz frequency grid pitch in particular. This was connected with division into "trunks" in "Altay" system. River craft radio stations use equipment with the same repetition factor, also. Demand for communication channels, growing every year, mostly satisfied by this particular range usage. Transmitter combiners CH-4(2)A-50S(D) occurs to be the most successful solution for constructing multichannel system, operating with common antenna, in this case. Together with antenna DS8-ALT, duplexer DPF4-4A, receiver distribution panel PRP-2(4)A CH-4(2)A-50S(D) will represent complete solution for your antenna-feeder system.

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

Manufacturer adjusts transmitter combiner to customers operating frequencies.

Hybrid transmitter combiner CH-4A-50D





300-360 MHz Low-loss transmitter combiners

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Electrical specifications

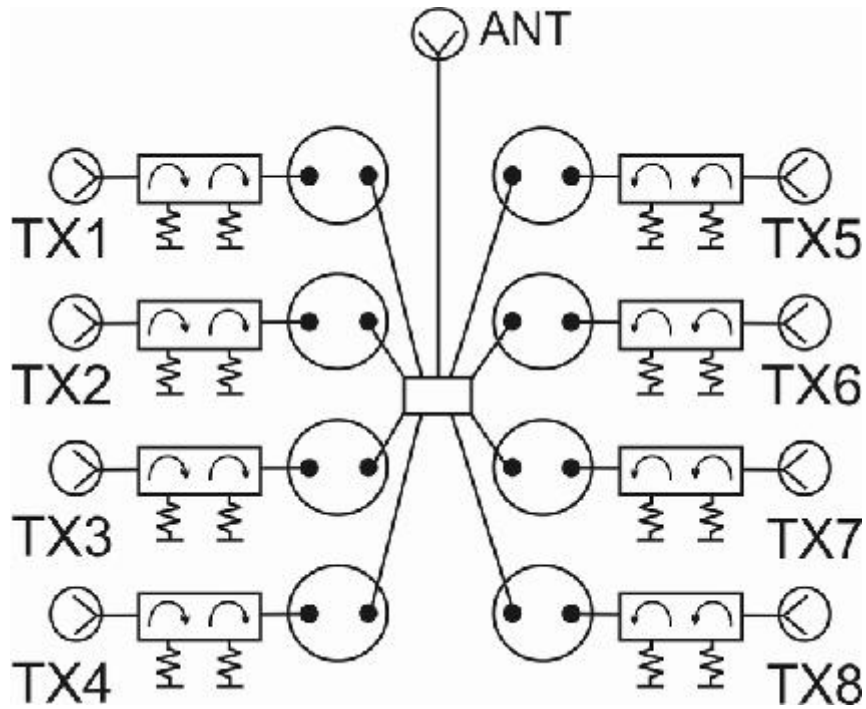
Model	CL10-2A-50	CL10-4A-50	CL10-6A-50	CL10-8A-50
Operating frequency band, MHz			300-360	
Insertion loss @ min. space, dB	3,2	3,6	3,9	4,2
Min. space TX/TX, kHz			200	
Impedance, Ohm			50	
Isolation TX-TX not less, dB			75	
VSWR, not more than			1,5	
Input power, W			not more than 50	
Temperature range, °C			-30 to +60	
Cavity electrical length			1/4λ	

Mechanical specifications

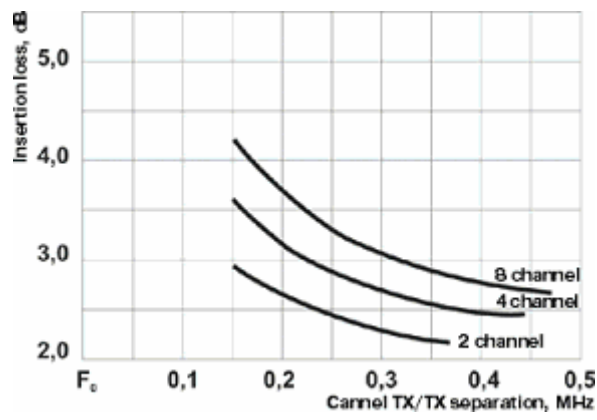
Model	CL10-2A-50	CL10-4A-50	CL10-6A-50	CL10-8A-50
Diameter of cavity, mm (ins.)			257 (10")	
Weight without rack, kg	6,6	12,4	19	24,9
Connector			N-female	
Mount to 24-inch rack			shipped with rack	

Inter-Kosketus Oy Company offers 10-inch cavity transmitter combiner, enabling to combine up to 16 transmitting channels on common antenna. Flexible combiner tuning system enables to combine channels with 150 kHz or larger pitch. Large frequency separation is preferred and it is possible if you have competent frequency plan.

Low loss transmitter combiner CL10-8A-50



Dependence of loss on frequency separation TX-TX for CL10-A series transmitters combiners





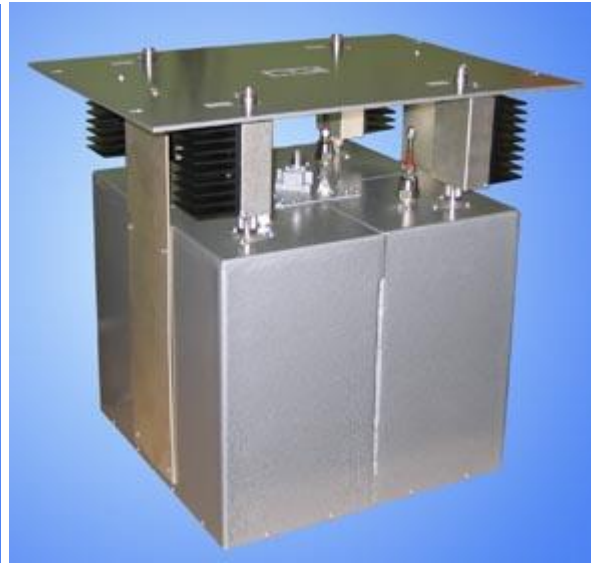
300-360, 400-490 MHz Low-loss transmitter combiners TETRA-A, TETRA-U

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TETRA-2U



TETRA-4U



Electrical specifications

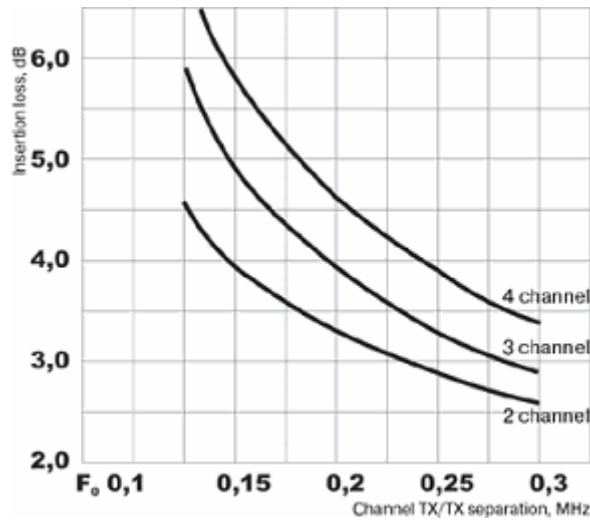
Model	TETRA-4A	TETRA-8A	TETRA-2U	TETRA-4U	TETRA-8U
Operating frequency band, MHz	300-360	300-360	400-490	400-490	400-490
Impedance, Ohm			50		
Number of channels	4	8	2	4	8
Min. space TX/TX, kHz			125		
Insertion loss @ dB@300kHz, dB	3	4.5	2.6	3.4	4.5
Input power, W			50		
Cavity electrical length			1/4λ		
Isolation TX-TX not less, dB			75		
VSWR			not more than 1,3		
Temperature Range			30°C to +60°C		

Mechanical specifications

Model	TETRA-4A	TETRA-8A	TETRA-2U	TETRA-4U	TETRA-8U
Weight, kg	15.7	31.9	8	15.2	30.7
Connector			N-female		
Length/Width/Depth, sm	51x49x36	51x49x72	51x49x18	51x49x36	51x49x72

Taking into account the enhanced demand for 4 and 8 channel trunking systems a combiner has been worked out on the basis of four-resonator monoblock that is mounted at 19" stand. This has allowed to optimize the ratio volume/Q-factor for 19-inch construction solution. The combiners TETRA-A (at 300-360 MHz) and TETRA-U (at 400-490 MHz) represent a good solution for constructing base stations of the same name standard.

Dependance of loss on frequency separation TX-TX for TETRA-A and TETRA-U low loss transmitters combinets



Low loss transmitter combiner TETRA-4A electric diagram

