Control Station Combiner

Standard SN Series

380-450MHz CS3845-xx05-SN Series



RFI's range of Standard SN Control Station Combiners combine multiple shared Tx output / Rx input (T/R) ports from control station radios and then separate them into two separate paths which can be terminated via a duplexer to a single antenna or connected to separate transmitter and receiver antennas. The CSC provides predictable co-located control station radio transceiver to transceiver isolation and full frequency agility within the designated band.

Compatible with both analog and digital communication systems the CSC is modular in construction providing easy expansion accommodating from 4 up to 32 channels. Fitted to 19 inch rack front panels these units are compact and robust maximizing heat dissipation for relatively high per channel duty cycles.

Features:

- Combines transceivers in the 380 to 450MHz frequency band
- Effective combining method for frequency agile single port mobile transceivers
- Multiple shared (T/R) ports are separated into Rx and Tx only ports
- Modular and expandable from 4 up to 32 channels
- Fixed non-tunable predictable port to port isolation
- 19 inch rack mountable
- 50W per channel rating



Specifications:

Model Number	CS3845-xx05-SN				
Model number derivative	04	08	12	16	32
Number of channels	4	8	12	16	32
Туре	Banded				
Frequency range	380-450MHz				
Minimum Tx to Tx frequency separation between channels	0MHz				
Input power per channel (maximum)	50W				
Insertion Loss (typical +/-1dB)	8dB	11.5dB	14dB	14dB	17dB
Antenna to Tx Isolation (typical)	55dB				
Tx to Tx Isolation (typical)	60dB				
Tx to Rx Isolation (typical)	60dB				
Input port Return Loss / VSWR	>14dB / <1.5:1				
Impedance	50 Ohm				
Termination connectors	N (F)				
Finish	Painted Black				
Depth	17.8"				
Total 19 inch Rack Units (height)	1RU	3RU	4RU	5RU	11RU
Temperature Range	14°F to 122° F				

RFI 9329 Ravenna Rd. Suite C

Twinsburg OH 44087 USA Phone: 330 486 0706 Fax: 330 486 0705

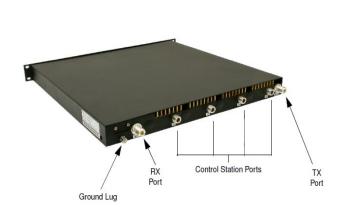
Control Station Combiner

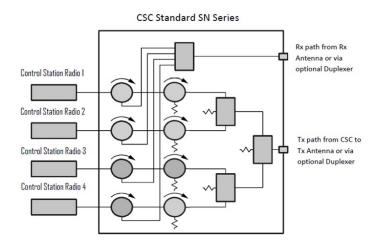
Standard SN Series

380-450MHz

CS3845-xx05-SN Series







CS3845-0405-SN Port allocations

Functional block diagram of a 4-Ch Standard SN CSC

Ordering Information	Description	
CS3845-0405-SN	Control Station Combiner, 380-450MHz, 4 Ch 50W N(F)	
CS3845-0805-SN	Control Station Combiner, 380-450MHz, 8 Ch 50W N(F)	
CS3845-1205-SN	Control Station Combiner, 380-450MHz, 12 Ch 50W N(F)	
CS3845-1605-SN	Control Station Combiner, 380-450MHz, 16 Ch 50W N(F)	
CS3845-3205-SN	Control Station Combiner, 380-450MHz, 32 Ch 50W N(F)	

RFI 9329 Ravenna Rd. Suite C Twinsburg OH 4408

Twinsburg OH 44087 USA Phone: 330 486 0706 Fax: 330 486 0705