

Control Station Combiner

Standard SN Series

746-869MHz

CS7486-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 746 to 869MHz 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	CS7486-xx05-SN					
Model number derivative	04	08	12	16	24	32
Number of channels	4	8	12	16	24	32
Type	Banded					
Frequency range	746-869MHz					
Minimum Tx to Tx frequency separation between channels	0MHz					
Input power per channel (<i>maximum</i>)	50W					
Insertion Loss (<i>typical +/-1dB</i>)	8.5dB	11.5dB	15dB	15dB	18.5dB	18.5dB
Antenna to Tx Isolation (<i>typical</i>)	55dB					
Tx to Tx Isolation (<i>typical</i>)	60dB					
Tx to Rx Isolation (<i>typical</i>)	60dB					
Input port Return Loss / VSWR	> 14dB / < 1.5:1					
Impedance	50 Ohm					
Termination connectors	N (F)					
Finish	Painted Black					
Depth	16.5"					
Total 19 inch Rack Units (<i>height</i>)	1RU	1RU	3RU	3RU	4RU	5RU
Temperature Range	14°F to 122° F					

RFI

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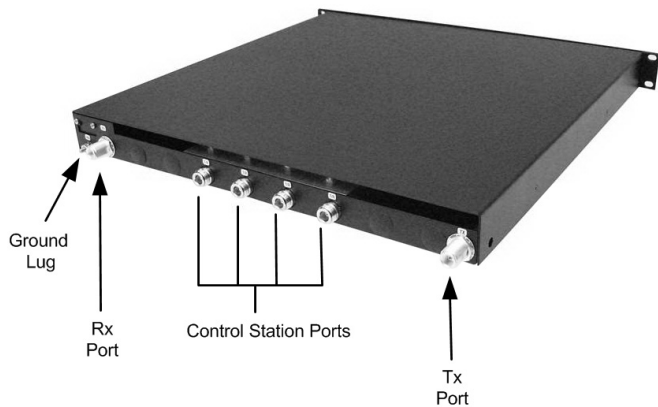
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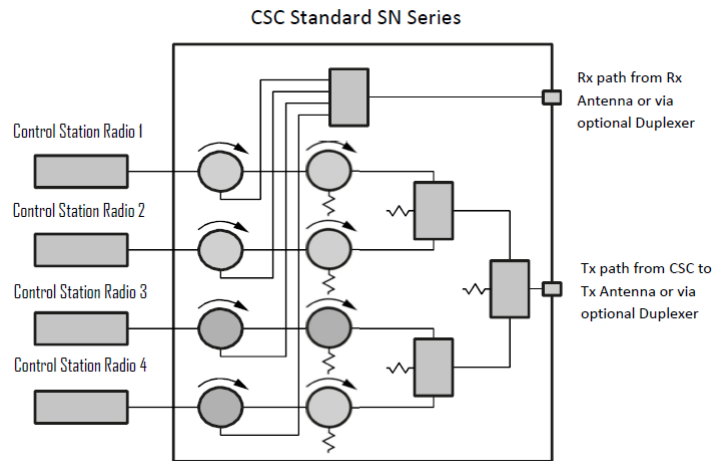
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CS7486-0405-SN Port allocations



Functional block diagram of a 4-Ch Standard SN CSC

Ordering Information	Description
CS7486-0405-SN	Control Station Combiner, 746-869MHz, 4 Ch 50W N(F)
CS7486-0805-SN	Control Station Combiner, 746-869MHz, 8 Ch 50W N(F)
CS7486-1205-SN	Control Station Combiner, 746-869MHz, 12 Ch 50W N(F)
CS7486-1605-SN	Control Station Combiner, 746-869MHz, 16 Ch 50W N(F)
CS7486-2405-SN	Control Station Combiner, 746-869MHz, 24 Ch 50W N(F)
CS7486-3205-SN	Control Station Combiner, 746-869MHz, 32 Ch 50W N(F)

Supporting Products

RFI can supply a range of duplexers to support the use of our Control Station Combiners.



Model Number	DP767985-0801-32	DP7680-0801-32	DP8086-0801-32
Frequency Range #1	762-776MHz / 851-869MHz	762-776MHz	806-824MHz
Frequency Range #2	792-824MHz	792-806MHz	851-869MHz
Pass Band	14 / 32 / 18MHz	14MHz	18MHz
Tx to Rx Separation	30 / 45MHz	30MHz	45MHz

Ordering Information	Description
DP767985-0801-32	Triplexer 762-776 / 851-869MHz, 792-824MHz PB, 100W, N (F), 2RU
DP7680-0801-32	Duplexer 762-806MHz, 14MHz PB, 30MHz T/R, 100W, 2RU
DP8086-0801-32	Duplexer 806-896MHz, 18MHz PB, 45MHz T/R, 100W, 2RU

Refer to individual data sheets for more detailed information.

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