ICS-75 Combiner Shelf

Modem Accessories



Introduction

The ICS-75 combiner shelf consists of four IF combiners and four IF splitters built into the same chassis.

Operating in the IF frequency range of 50 to 180 MHz, the ICS-75 organizes the mass of cables and individual splitter/combiners usually associated with earth station IF racks into one convenient package.

A logically arranged rear panel eliminates confusion and greatly eases equipment installation and rack configuration.

The ICS-75 is composed entirely of passive components, and therefore requires no AC power input.

Uplink Combiners

The ICS-75 contains four uplink combiner channels. Each of the four transmit combiner channels is housed in an enclosed module.

Each module contains a combiner, a power monitor, and input/output connectors. Up to eight input connectors and an output connector appear at the rear panel of the ICS-75, while a monitor port appears at the front panel. Therefore, each channel can be ordered to combine four, six, or eight inputs into one output.

The ICS-75 comes standard with four inputs; six and eight inputs are optional.

Input comes from the various modulator IF outs, and the output is routed to the appropriate up converter. The four resultant transmit outputs have their own monitor ports, conveniently accessible at the front panel for monitoring and test purposes.

Downlink Splitters

The receive side of the ICS-75 houses four splitter modules, operating much like the transmit side, only in reverse. Each splitter will accept one downlink signal and split it into four, six, or eight (depending on what configuration is ordered) receive outputs. These outputs can then be routed to the IF inputs of the demodulators.

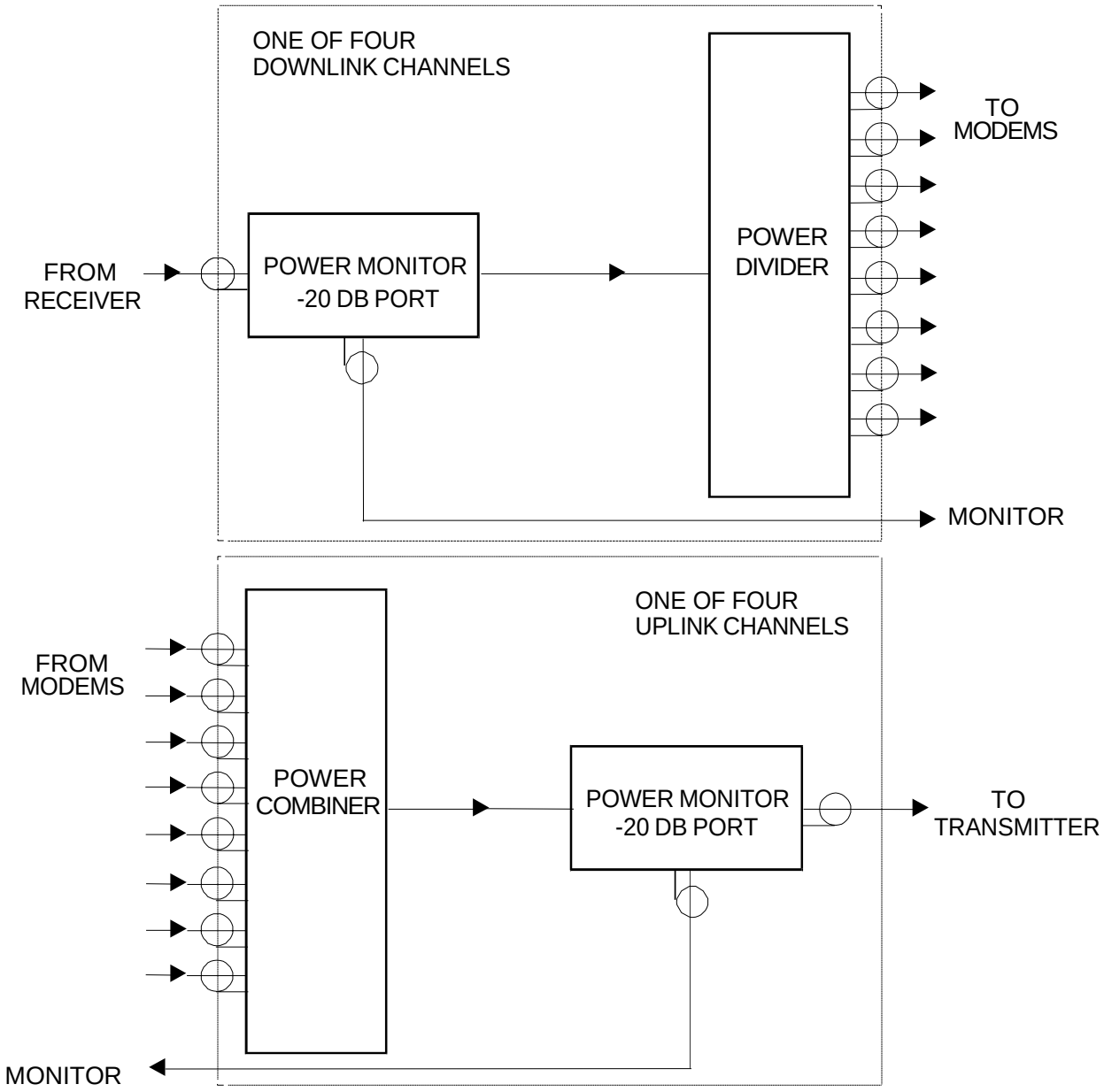
The fourth downlink channel module may also have 10 outputs as an option. As with the uplink channels, a monitor port for each downlink channel (before being divided) is available at the front panel.

Specifications

Frequency Range	50 to 180 MHz
Impedance (All Ports)	75 Ω (50 Ω optional)
Return Loss (Inputs and Outputs)	20 dB minimum
IF Loss by Number of Ports:	
4 Ports	<7.2 dB ± 0.5 dB
6 Ports	<9.2 dB ± 0.5 dB
8 Ports	<10.5 dB ± 0.5 dB
Flatness	± 0.25 over 20 MHz
Monitor Coupling Loss	20 dB ± 0.5 dB
Return Loss (Monitor Ports)	20 dB minimum
Connectors (All)	BNC female
Dimensions (height x width x depth)	3.5” x 19” x 22” (2RU)
Weight	10 lbs

Several versions of the ICS-75 are available. Please consult your Comtech EF Data sales representative for more information.

Typical Combiner Shelf Configuration



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