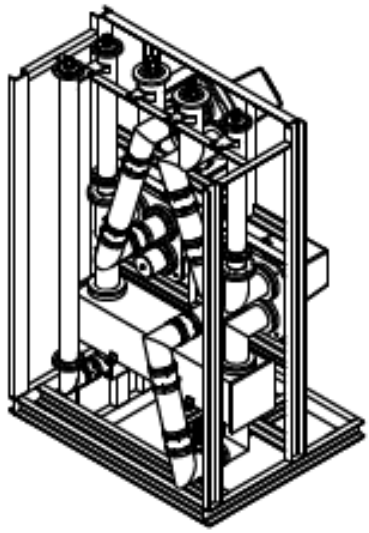
50 kW FM Switching Combiner

50 kW Switching Combiner System for FM
Any Single FM Channel (88.1 to 107.9 MHz)
2 x 25 kW average power



The FM Switching Combiner consists of (1) Coaxial Hybrid used as a 2-way power combiner with (3) Motorized Coaxial Switches to route the transmitter signals to the combiner, to a test load port or to the system output. See the simplified block diagram below.

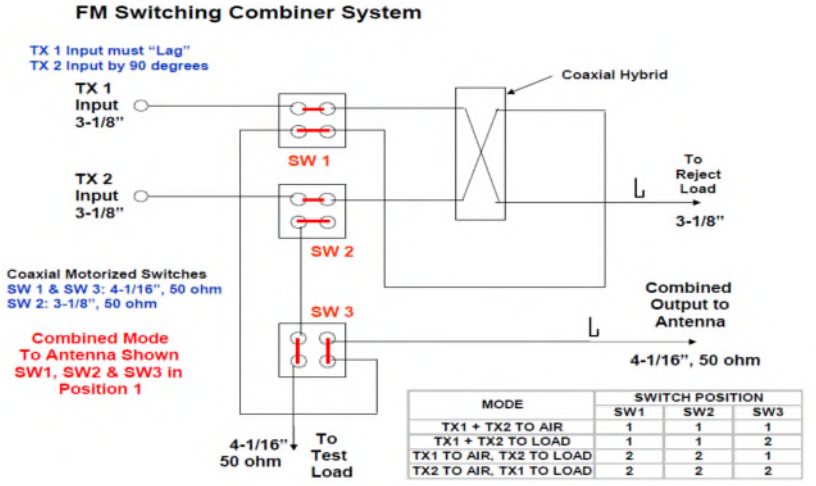
The system is constructed with 3-1/8 inch and 4-1/16-inch coaxial Line and resides in an aluminum floor-mount base frame with vertical input and output connections. Reject and test loads are not included.

The two input signals from the transmitters must be in quadrature.

2 x 25 kW avg. FM Switching Combiner System, includes:
(1) 3 dB Coaxial Hybrid Coupler
(3) Motorized Coaxial Switch, 4-1/16 inch
Interconnect components between above items
Floor-mount base frame

Specifications:

Inputs:	3-1/8-inch, 50-ohm EIA flanged
Reject Load Port:	3-1/8-inch, 50-ohm EIA flanged
Combined Output:	4-1/16-inch, 50-ohm flanged
Test Load Port:	4-1/16-inch, 50-ohm flanged
TX 1 input signal must "lag" TX 2 input signal by 90 degrees	
Switch AC Supply:	120 or 240 VAC, specify with order
Switch Control:	12 VDC or 24 VDC specify with order
Reject Load and Test Load are not included	
Output Power Rating:	50 kW avg.
Input Return Loss:	28 dB or less 88.1 to 107.9 MHz (all modes)
Input Isolation:	30 dB min. over 88.1 to 107.9 MHz
Approx. Dimensions:	See layout drawing next page



50 kW FM Switching Combiner simplified block diagram

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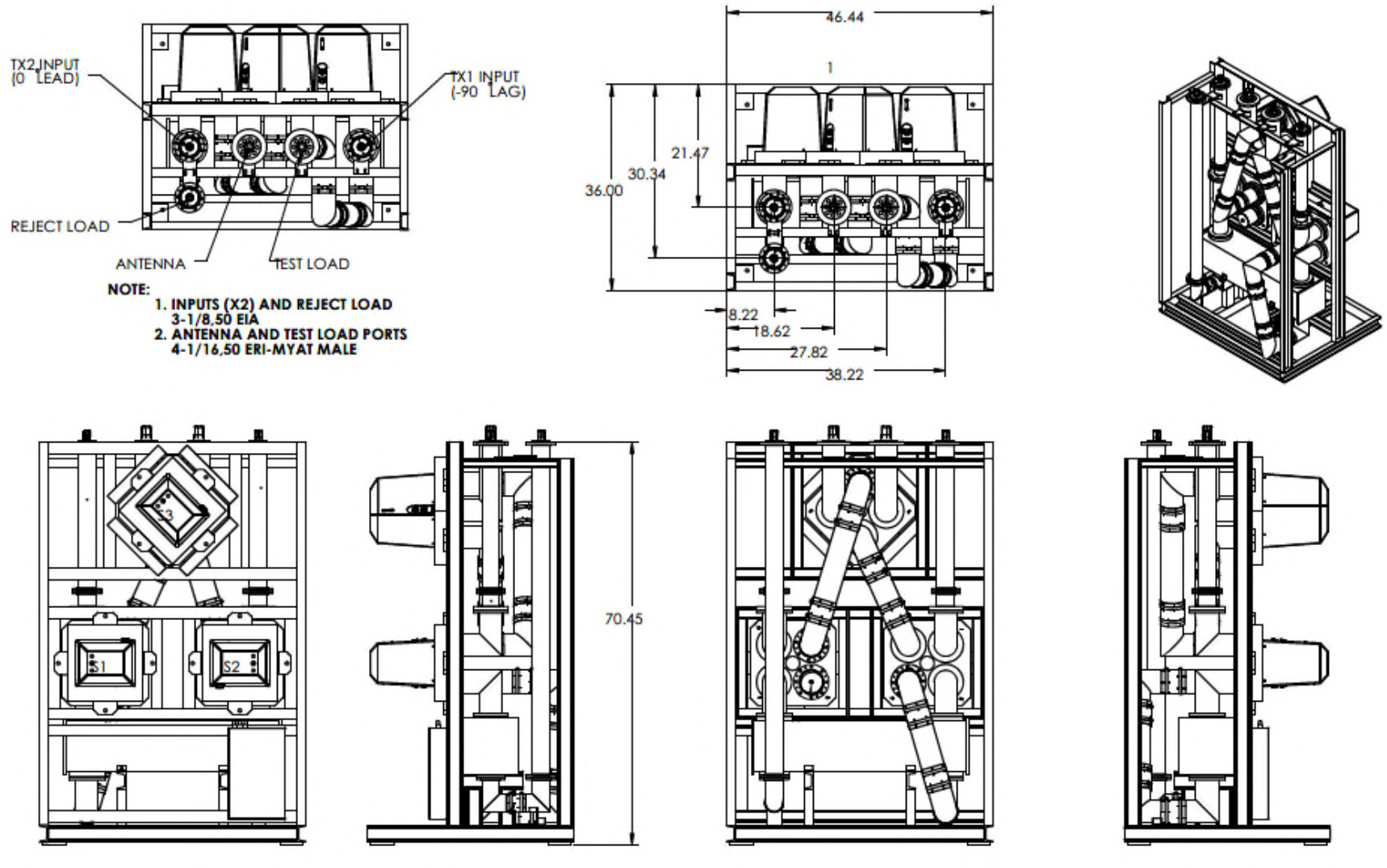

50 kW FM Switching Combiner layout drawing, dimension shown are inches.