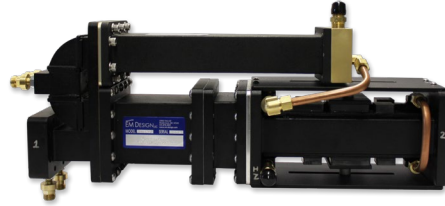


## S-Band Distributed 3-Port Isolator Assembly, Model #102647



### Product Overview

This Isolator Assembly consists of the EM Design Distributed 3-Port Circulator, four adjustable E-field couplers and an EM Design Waterload, Model #R284-3.0.

The straight input port 1 is on the left and the output port 2 is shown on the right side of the photograph. The power reflected at port 2 is absorbed by the load on port 3.

The high power S-band circulator is based on EM Design's unique patented concept and is especially attractive for isolating reflection from resonant loads such as accelerators or other similar devices. This isolator assembly can be set at the 2.998 GHz frequency, the 2.856 GHz frequency or optimized for other S-Band frequencies. The power input, port 1, and terminated port 3, each have two variable insertion E-Field probes (at each port) for monitoring and/or control signals. These probes can be adjusted from the nominal 60 db coupling. Water cooling is connected in series so that the flow is conveyed through the circulator and the attached load.

This model and Model #102647A are equal in performance but provide different orientations of port 1.

### Unit Specifications

<b>Peak Power</b>	8 MW	<b>Center Frequency</b>	2.998 GHz
<b>Average Power</b>	8 KW		
<b>Flanges</b>	CPR284F	<b>VSWR (Port 1)</b>	1.10 max
<b>Water Flow</b>	4.5 GPM		
<b>Required Water Treatment</b>	Deionized Water		
<b>Water Temperature</b>	25° to 40° C (selectable)	<b>Isolation (Port 2 to Port 1)</b>	>35 db
<b>Gas Pressure</b>	35 PSIG SF <sub>6</sub>		
<b>Length</b>	19.5" (495 mm)	<b>Insertion (Port 1 to Port 2)</b>	<0.30 db
<b>Weight</b>	30 lbs. (13.6 Kg)		
<b>Probe Connector</b>	Type N Female		