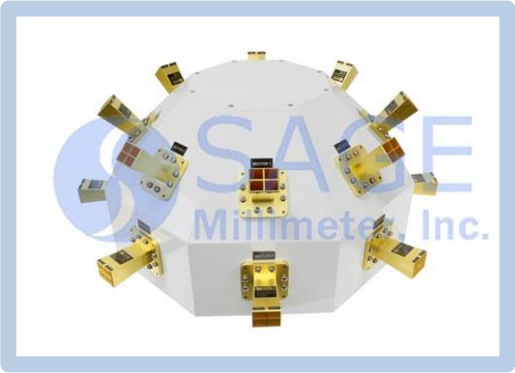
# SSR-2830233605-28-S1

Advanced

## Ka Band Beam Switchable Receiver Assembly, 64 Channel

### Description:

**Model SSR-2830233605-28-S1** is a Ka Band receiver with four 16, total 64 channels receive paths. The receiver can be operated at the frequency range 27 to 29 GHz. Each 16 channel receiver path utilizes an SP16T with 100 ns switching speed and 50 dB isolation for 360° coverage in the horizontal plane and 90° coverage in the vertical plane. The receiver can be paired with the **SST-2830231719-28-S1** for 5G and object detection etc. applications.



### Features:

- Ka Band Operation
- 360° Coverage
- Good Channel Isolation

### Applications:

- 5G Applications
- Telecommunications
- Object Detections

### Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---|---|---|---|
| Antenna 3 dB Beamwidth, E Plane | | 45° | |
| Antenna 3 dB Beamwidth, H Plane | | 45° | |
| Antenna Gain | | 11 dBi | |
| Antenna Polarization | | Linear | |
| RF Frequency Range | 27 GHz | 28 GHz | 29 GHz |
| Receiver Gain | | 5 dB | |
| Receiver Noise Figure | | 3.6 dB | |
| Channel Isolation | | 50 dB | |
| Switch Speed | | 100 ns | |
| System Gain | | 16 dB | |
| DC Supply Voltage | | +5 $V_{DC}$/1,800 mA; -5 $V_{DC}$/800 mA | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | +10 °C | | +40 °C |

### Mechanical Specifications:

| Item | Specification |
|---|---|
| RF Input Port (64X) | WR-28 Waveguide with Custom Flange (when 11 dBi Antenna is removed) |
| RF Output Port (4X) | K(F) Connector |
| Calibration Port | K(F) Connector |
| Bias and TTL Connector | 37 Pin Micro-D Connector |
| Material | Aluminum |
| Weight | 25 lbs |
| Finish | White Paint |
| Size | 19.67” (W) x 8.75” (H) |
| Outline | SK-RA-C1 |

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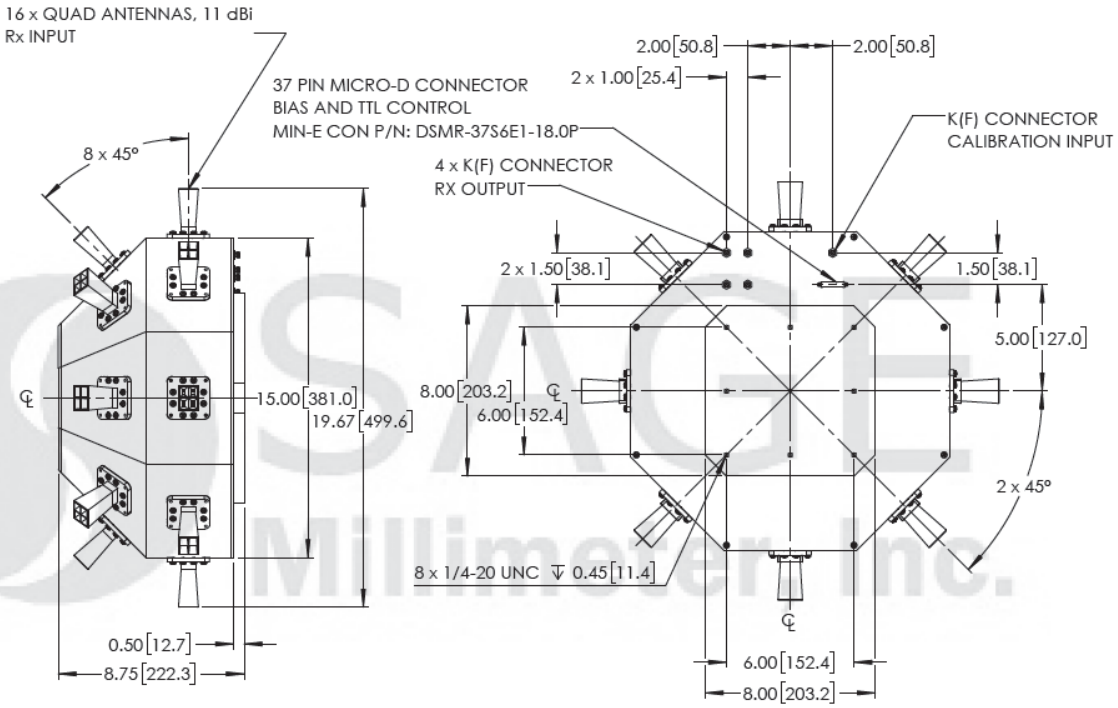
## Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])




**Note:**

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- The device is static sensitive. Always follow ESD rules when working with the device.
- Wrong bias or reverse bias on the receiver will damage the device.
- Any foreign objects in the horn antenna will cause performance degradation and possible device damage.

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