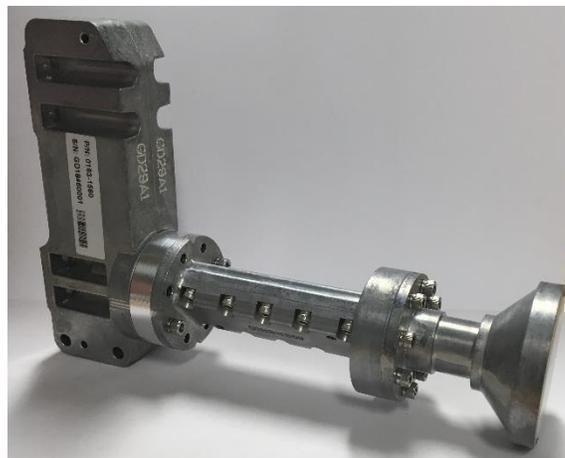


# 2.4 m Ka Band Antenna - Transmit Receive

## Series 3244 w/Ka Band Circular Polarity Feed

### Satcom & Antenna Technologies Division



#### Key Features

- Transmit Quality Precision SMC Reflector
- Fine Elevation and Azimuth Adjustments
- Transmit Frequency 29.25-30.0 GHz
- Receive Frequency 18.1-20.2 GHz
- Circular Polarity
- Durable and Rugged Construction for Ease of Shipping and Handling

#### Description

CPI Satcom & Antenna Technologies Inc. (CPI SAT) 2.4m Ka-Band VSAT Antenna Series 3244 is ideally suited for demanding commercial applications. The four-piece compression molded reflector is precision manufactured for high-efficiency Ka-Band operation. The heavy-duty back structure provides precision support to the reflector as needed for Ka band performance, and the az/el mount is designed for easy installation on standard 6-5/8" (168mm) OD mounts. A Ka CP feed is matched to the antenna.

# 2.4 m Ka Band Antenna - Transmit Receive

## Series 3244 w/Ka Band Circular Polarity Feed

### Technical Specifications

Electrical		
Operating Frequency (GHz)	Receive Transmit	18.10-20.20 GHz 29.25-30.00 GHz
Antenna Gain, Midband ( $\pm 0.5$ dB)	Receive Transmit	51.5 dBi 54.2 dBi
Sidelobe Envelope, Co-Pol (dBi) 100 $\lambda$ / D < $\Theta$ $\leq$ 20° 20° < $\Theta$ $\leq$ 26.3° 26.3° < $\Theta$ $\leq$ 48° 48° < $\Theta$ < 180°		29 – 25 Log $\Theta$ dBi -3.5 dBi 32 – 25 Log $\Theta$ dBi -10 dBi (Typical)
Antenna Noise Temp*	10° 20° 30°	145 K 120 K 108 K
Cross-Pol Isolation		> 30 dB (On Axis)
VSWR	Receive Transmit	1.5:1 MAX 1.2:1 MAX
Feed Interface	Receive Transmit	WR-42 Flat WR-42 Flat

\*Noise Temperatures Estimated

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Fed, 4-piece (.8 F/D)
Mount Type	Elevation over Azimuth
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	$\pm 45^\circ$ Fine Adjustment, 360° Continuous
Mast Pipe Interface	6" Sch 80 Pipe (6.63 inch OD) 168mm

Environmental		
Wind Loading	Operational Survival	50 mph (80 km/h) (<0.5 dB Loss @ 22 GHz) 125 mph (200 km/h)
Temperature (Operational)		- 40° F to 140° F (- 40° C to 60° C)
Rain (Operational)		½ inch/h
Ice (Survival)		½ inch Radial
Atmospheric Conditions		Salt, Pollutants, and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft <sup>2</sup>

Contact us at [CustomerCareSAT@cpii.com](mailto:CustomerCareSAT@cpii.com) or call us at +1 770-689-2040

The data should be used for basic information only.  
Formal, controlled specifications may be obtained from CPI for use in equipment design.



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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design. © 2022 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

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