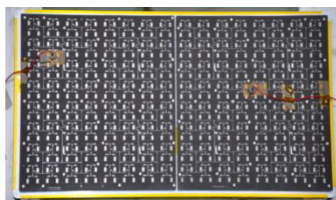
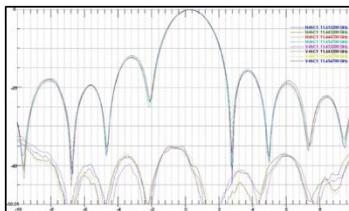


## Planar Array Antenna

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed a high gain, microstrip planar array antenna operating at Ku-Band for transmit and receive frequencies simultaneously for on board applications.



Planar Array Antenna



Radiation Patterns of Planar Array Antenna

### Salient Features

- ✦ Two-layer, array antenna consists of 512 elements with waveguide feed network provides 30 dBi peak gain at Tx. & Rx. frequencies in orthogonal polarizations.
- ✦ Cross polar levels are better than - 30 dB.

### Major Specifications

✦ Frequency Band	:	11 GHz (TX) & 13.75 GHz (Rx)
✦ Bandwidth	:	5% around Tx, Rx
✦ Peak Gain	:	30 dBi min.
✦ HPBW	:	$\pm 1^\circ$ in Azimuth plane
✦ Array elements	:	512
✦ Cross polar levels	:	30 dB min.
✦ Power handling	:	10 W Max.
✦ RF interface	:	SMA for both Tx & Rx
✦ Size	:	640 x 320 mm <sup>2</sup>
✦ Mass	:	2.0 kg

## Technology Transfer

URSC/ISRO offers to transfer this technology of Planar Array Antenna to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

Technology Transfer & Industry Coordination Division (TTID),  
Programme Planning and Evaluation Group (PPEG),

📍 U R Rao Satellite Centre (URSC), ISRO, HAL Airport Road,  
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🌐 <https://www.ursc.gov.in/industry/index.jsp>