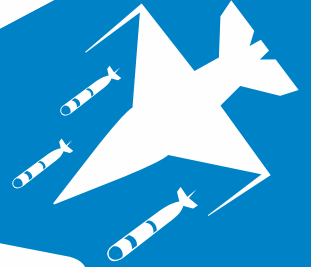
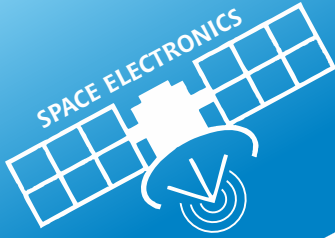
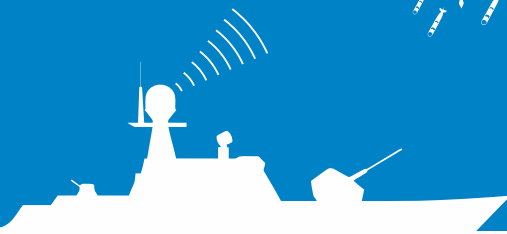
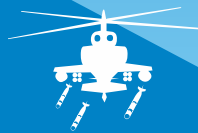
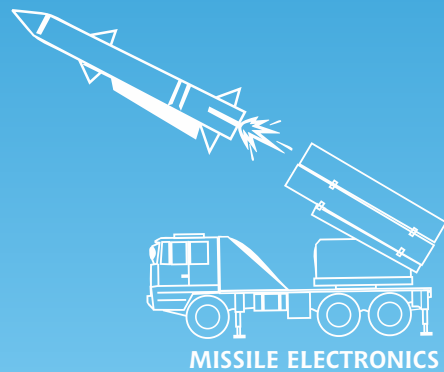
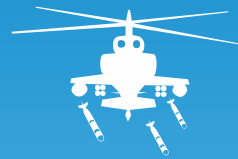
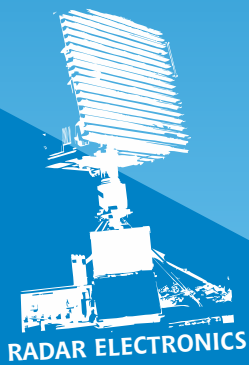


Astra Microwave Products Ltd.

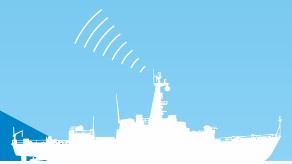


Research & Development
State-of-the-Art Infrastructure
High-Volume Production
Total Quality Management

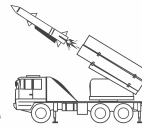
EXPLORE INNOVATE INVENT



ELECTRONIC WARFARE



www.astramwp.com



MISSILE ELECTRONICS

- ▶ Command Guidance Unit
- ▶ Radio Proximity Fuse
- ▶ L, S, C & X-band Transponders
- ▶ Phased Array based Telemetry Tracking System

TRANSPONDERS
(C & S BANDS)

10 TRM INTEGRATED
PLANK UNIT

SEEKER ELECTRONICS

AESA-BASED SEEKER
(UNDER DEVELOPMENT)

CGU ANTENNA



GIMBAL-BASED SEEKER

EXCITER / RECEIVER
FOR BRAHMOS

RADIO PROXIMITY FUSE

COMMAND GUIDANCE UNIT



TELEMETRY ELECTRONICS

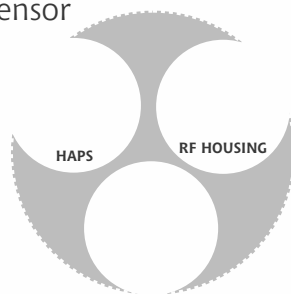
- ▶ Data and Video Telemetry Transmitters
- ▶ Telemetry Decoders, PCM Encoders
- ▶ Telemetry Receivers
- ▶ S, C & X-Band Integrated Telemetry Transponders
- ▶ Auto-Track Antenna Systems
- ▶ High Altitude Proximity Sensor

5W S-BAND TRANSMITTER

2W S-BAND
TRANSMITTER (SAAW)

1W S-BAND
TRANSMITTER

10 W S-BAND TRANSMITTER



TELEMETRY
RECEIVER
(1/2/5/10/20 WATT)

TELEMETRY
TRANSMITTER
(1/2/5/10/20 WATT)

S-BAND RECEIVER

TELE-COMMAND
RECEIVER

AUTO-TRACK
ANTENNA SYSTEM

DATA / VIDEO TELEMETRY
TRANSMITTER

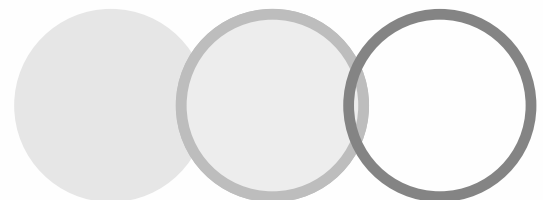
C-BAND TRANSPONDER

S-BAND TRANSPONDER

TELE-COMMAND
DIGITAL DECODER

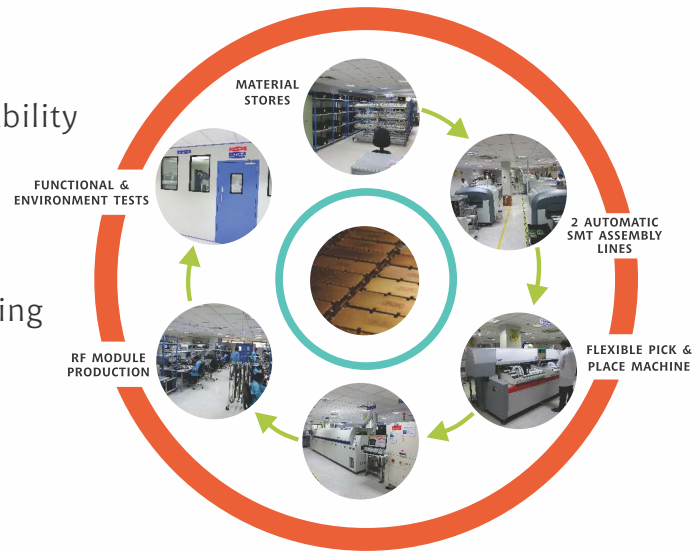
WIND PROFILE RADARS FOR ATMOSPHERIC STUDIES & MONITORING

- ▶ Multiple product offerings catering to varied wind profiling requirements.
- ▶ UHF Lower Atmospheric Wind Profiler with range up to 5 km in 1.5 m and 3 m Antenna variants.
- ▶ VHF Active Phased Array Radar with range up to 20km for Stratosphere-Troposphere Remote Sensing.



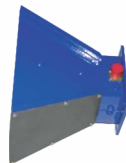
HIGH VOLUME PRODUCTION CAPABILITY

- ▶ IPC 610 Class 3 Capable Automatic Production Line
- ▶ Two Automatic Assembly lines with total Placement Capability of 48000 CPH
- ▶ SMT, Through Hole Capability
- ▶ ROHS Capable Equipment
- ▶ High mix, Low Volume and High Volume Capability
- ▶ ESD Compliance
- ▶ Clean Rooms of Class 10000 and actual RF Assembly under Class 100
- ▶ RF Testing Capabilities from DC-40 GHz including Automated Test Equipment
- ▶ In-house Environment Test Facilities



ANTENNAS

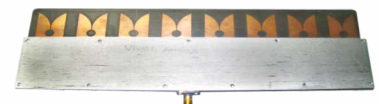
- ▶ Vivaldi Antenna
- ▶ Patch Panel Antenna
- ▶ Crossed Yagi
- ▶ Wide-band Spiral Array Antenna
- ▶ Dual-Polarized LPDA and many more catering to varied requirements.



HORN ANTENNAE
0.5 - 2 GHz
1 - 18 GHz
2 - 18 GHz



SPIRAL ANTENNAE
0.5 - 2 GHz
1 - 18 GHz
2 - 18 GHz



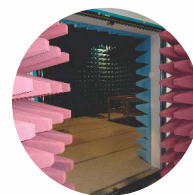
VIVALDI ANTENNA

TEST FACILITIES

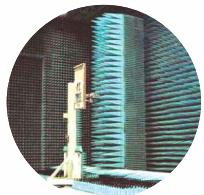
- ▶ The following test facilities are offered on-hire basis:
 - EMI/EMC Test Facility:
 - Compliant to MIL STD 461 C/D/E/F
 - ALSE Chamber Measuring 6.7m x 6.1m x 4m
 - Antenna Test Range:
 - Azimuth over elevation positioner
 - Digital pattern recorder, Gain, R/L, Radiation pattern measurements



ANTENNA TEST RANGE



EMI / EMC CHAMBER



NFTR TEST FACILITY

