



Communications & Power Industries

# Electronic Warfare and Radar Products

*Durable and Reliable*

HIGH POWER HELIX TWTs

TRANSMITTERS

POWER SUPPLIES

INTEGRATED MICROWAVE ASSEMBLIES (IMAs)

MICROWAVE POWER MODULES (MPMs)

COUPLED CAVITY TWTs

KLYSTRONS

GYROTRONS

POWER GRID DEVICES

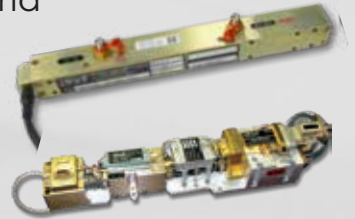


## EW and Radar Products

Communications & Power Industries products are found in EW and radar systems around the globe.

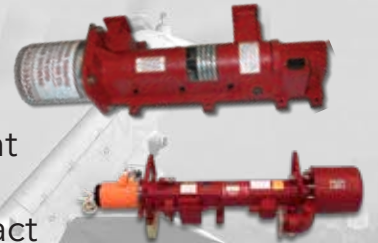
### High-Power TWTs

- Available in 1 GHz to 40 GHz
- Available in pulsed and CW modes
- Wideband
- Moderate power up to 2.5 kW CW and 2.5 kW peak power



### Coupled-Cavity TWTs

- Up to 11% IBW
- Up to 200 kW
- Various duty
- Military environment qualified
- Efficient and compact
- Air and liquid cooled



### Klystrons & Gyrotrons

- UHF to W band
- Up to 5 MW peak power
- Mobile, ground, and shipborne radar applications
- Directed energy



### Power Grid Devices

- Over 600 power grid devices
  - Diodes
  - Triodes
  - Tetrodes
  - Pentodes
  - Planar Triodes (Power levels to 3 GHz)
- Sockets & hardware



Integral to the protection of warfighters worldwide by providing consistent reliable components.

For more electronic warfare products go to [www.cpii.com](http://www.cpii.com)



# Airborne, Shipboard, & Decoy Applications



## Transmitters

- Available in 1 GHz to 18 GHz
- Low noise figures
- Available in pulsed and CW modes



### Transmitter Capability Table

Band	Frequency	Output Power	Duty Cycle
Low Band	2 – 8 GHz	Up to 4 kW	Various
High Band	8-18 GHz	Up to 8 kW	Various
I/J Band	6-18 GHz	Up to 200 W	CW

## Power supplies

- Available in:
  - Low band
  - High band
  - I/J band
- Efficient
- Compact
- Military Environment Qualified



## Integrated Microwave Assemblies

- Available in 0.5 - 50 GHz
- Fast switching time
- Fast recovery time
- Military environment qualified
- Available with or without coax interfaces
- Efficient
- Compact
- Long pulse
- High duty



## Microwave Power Modules (MPMs)

- Available in 2 GHz to 40 GHz
- TWT & solid-state solutions
- Up to 1000 W
- Compact and lightweight
- Efficient and reliable





# EW and Radar Products

With a history of producing high-power, high quality products, we can help you with your EW and radar systems.

Contact us at  
[ElectronDevices@cpii.com](mailto:ElectronDevices@cpii.com)  
or at call us at +1 978-922-6000

## Microwave Power Module (MPM) Capability Table

Band	Frequency	Output Power	Duty Cycle
Broadband	2.0–18.0 GHz	Up to 200 W	CW/Pulse
X-Band	9.0-10.0 GHz	1000 W	Pulse (10% max)
Ku-Band	13.75-15.5 GHz	110-600 W	CW
Ka-Band	26.5-40.0 GHz	60-160 W	CW/Pulse

## Traveling Wave Tube (TWT) Capability Table

Band	Frequency	Output Power	Duty Cycle
S/C Band	2–8 GHz	Up to 200 W	CW/Pulse
I/J Band	8–18 GHz	Up to 200 W	CW/Pulse
I/J Band	6–18 GHz	Up to 200 W	CW/Pulse
K-Band	18.5 -26.5 GHz	Up to 50 W	CW/Pulse
Ka-Band	26.5–40.0 GHz	Up to 50 W	CW/Pulse

## Coupled-Cavity Traveling Wave Tube (CCTWT) Capability Table

Band	Frequency	Output Power	Duty Cycle
S-Band	2.75-3.6 GHz	Up to 180 kW Pk	Various
C-Band	5.25–5.90 GHz	Up to 200 kW Pk	Various
X-Band	8.4–11.0 GHz	Up to 120 kW Pk	Various
Ku-Band	15.3–15.7 GHz	Up to 60 kW	Various
Ka-Band	33.0–37.0 GHz	Up to 30 kW	Various

Power levels and frequencies are dependent on the TWT selected

## Klystrons & Gyrotrons Capability Table

Band	Frequency	Output Power	Duty Cycle
UHF Band	Various	Up to 3.0 MW	Various
S-Band	Various	Up to 5.0 MW	Various
C-Band	Various	Up to 3.0 MW	Various
X-Band	Various	Up to 5.0 MW	Various
Ku-Band	Various	Up to 30 kW	Various
W-Band	Various	Up to 2.5 MW	Various

## Power Supply Capability Table

Band	Peak Power	Operating Voltage	Operating Temperatures	Altitude	VED Type
X-Band	800 Watts	2750 V	-45 to +88°C	70,000 ft	Magnetron
I/J-Band	50-100 Watts	4400 V (cathode)	-30 to +60°C	10,000 ft	Helix TWT
Ku-Band	400 Watts (pulsed)	28 VDC	-40 to +70°C	36,000 ft	Booster Helix TWT
Low band	400-1000 Watts	4.4 kV	-30 to +80°C	50,000 ft	Helix TWT

Power levels and frequencies are dependent on the TWT selected



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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.

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