



# Weather Radar Products

*Weather predicting and tracking components in radar systems around the world*

## KLYSTRONS

750 kW to 1 MW S-Band  
200 kW to 1 MW C-Band

## MAGNETRONS

1 MW S-Band  
250-500 kW C-Band  
250 kW X-Band

## RECEIVER PROTECTORS & LIMITERS

S-Band  
C-Band  
X-Band

## KLYSTRON TRANSMITTERS

1 MW S-Band  
1 MW C-Band  
250 kW C-Band

## MAGNETRON TRANSMITTERS

1 MW C-Band  
350 kW C-Band  
350 kW Outdoor Unit (C-Band)  
350 kW Outdoor Unit (X-Band)

# Weather Radar Products

Communications & Power Industries' reliable and durable products are found in weather radar systems around the globe

## Klystrons

- S-Band
  - Excellent frequency stability
  - Mechanically tunable frequency
  - Air-cooled
  - Peak power up to 1 MW
- C-Band
  - Excellent frequency stability
  - Fixed tuned to 50 MHz IB
  - Air-cooled
  - Peak power up to 250 kW



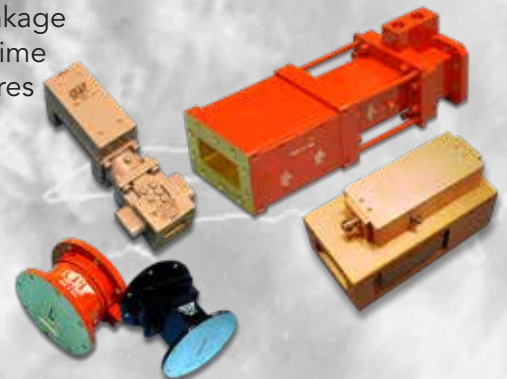
## Magnetrons

- S-, C-, and X-Band magnetrons
- Excellent frequency stability
- Mechanically tunable frequency
- Air-cooled anode
- Peak power up to 1 MW



## Receiver Protectors and Limiters

- S-, C-, and X-Band products
- Superior broadband isolation
- High peak power
- Low output leakage
- Fast recovery time
- Low noise figures



# Reliability and Innovation



Check out all CPI weather radar products at [www.cpii.com](http://www.cpii.com)



## Klystron Weather Radar Transmitters

- S-, C-, and X-Band transmitters
- Excellent stability and performance
- Tunable
- Up to 1 MW peak output power
- Forced-air cooled
- Touch screen with local/remote control
- Ethernet connectivity for remote monitoring and control

## Magnetron Weather Radar Transmitters

- S-, C-, and X-Band transmitters
- Sheltered or outdoor models
- Forced-air cooled
- Touch screen with local/remote control
- Ethernet connectivity for remote monitoring and control
- Excellent Doppler performance
- Mechanically tunable frequency

CPI Electron Device Business is the world's largest producer of coaxial magnetrons, klystrons and receiver protectors. With our experience and product breadth, we can support most new and existing weather radar systems.

CPI EDB is uniquely positioned to deliver either individual microwave components or complete transmitters, based on each customer's needs. Each transmitter provides a wide range of output power options along with custom user interfaces and remote networking capability.



# Weather Radar Products

With a history of producing high-power, high-quality products, CPI can help you with your weather radar products.

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

## Klystrons

### Typical Operating Parameters

Band	Frequency (GHz)	Peak Power
S-Band	2.7 to 2.9	800 kW
C-Band	5.45 to 5.65	200 kW to 1 MW

## Magnetrons

### Typical Operating Parameters

Band	Frequency (GHz)	Peak Power	Duty Cycle
S-Band	2.7 to 2.9	800 kW	Various
C-Band	5.45 to 5.65	200 kW to 1 MW	Various
X-Band	8.5 to 9.6	250 kW	Various

## Receiver Protectors and Limiters

### Typical Operating Parameters

Band	Peak Power	Average Power	Insertion Loss	Recovery Time	Flat Leak	Spike Leak
S-Band	Up to 1.25 MW	Up to 10 kW	<0.8 dB	<1 $\mu$ s	<50 mW	<250 mW
C-Band	Up to 1.25 MW	Up to 900 kW	<1.0 dB	<1 $\mu$ s	<50 mW	<250 mW
X-Band	Up to 300 kW	Up to 300 kW	<1.0 dB	<1 $\mu$ s	<50 mW	<250 mW

## Transmitters

### Typical Operating Parameters

Band	Frequency (GHz)	Peak Power	Average Power
S-Band	2.7 to 3.0	850 to 1000 kW	2 kW
C-Band	5.6 to 5.65	250 to 1000 kW	0.6 to 2 kW
X-Band	9.4 to 9.6	300 kW	0.3 kW



[cpii.com](http://cpii.com)



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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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