

Communications & Power Industries High-Power Transmitters

KLYSTRON TRANSMITTERS

S- and C-Bands

MAGNETRON TRANSMITTERS

S-, C-, X-, and Ku-Bands

TWT TRANSMITTERS

S-, C-, X-, K- and Ka-Bands

CCTWT TRANSMITTERS

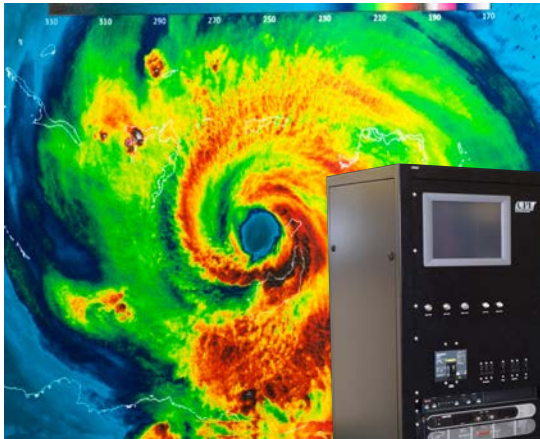
S-, C- and X-Bands

PULSED and CW

INSTRUMENTATION AMPLIFIERS

L-, S-, C-, X-, Ku-, K- and Ka-Bands

Weather Radar Transmitters



- Support most new and existing weather radar systems
- Individual microwave components or a complete transmitter
- Available in: S-Band, C-Band and X-Band



Klystron Weather Radar Transmitters

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

Magnetron Weather Radar Transmitters

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

Industrial and Scientific Transmitters

- Available in rack mount and turnkey configurations
- Compact and ultra-wide band
- Available in: L-Band, S-Band, C-Band, X-Band and Ku-Band

IOT, Gyrotron and TWT Transmitters

- Liquid cooled
- Four port circulator available
- GaN Solid State Power Amplifier Driver
- Superior stability, phase and amplitude ripple
- High power, high efficiency
- User friendly control and operation



EMC/TWT CW & Pulsed Transmitters

- Available in rack-mount and turnkey configurations
- Compact and ultra-wide band
- Available in: L-Band, S-Band, C-Band, X-Band, Ku-Band, K-Band and Ka-Band

S-Band TWT Compact, Pulsed Amplifiers

- Single phase AC power
- Local or remote control
- Wide RF bandwidth
- GPIB remote

X-Band TWT Compact Pulsed Amplifiers

- Mobile
- Touchscreen
- Waveguide output
- GPIB remote



Military Radar Transmitters



Airborne Radar Transmitters

- S-, C-, and X-Band transmitters
- Ruggedized design
- Outstanding power per volume
- Easy to control/operate
- Forced-air cooled
- High levels of readiness

Surveillance Radar Transmitters

- S-, C-, and X-Band transmitters
- Resonant high-voltage power supply
- Forced-air cooled
- Outstanding power per volume

Naval Radar Transmitters

- X-Band transmitters
- Ruggedized design
- GaN technology
- Outstanding power per volume

High-Power Transmitters

Communications & Power Industries high-power transmitters are customized for your application. To discuss a customized solution, contact us at ElectronDevices@cpii.com or call us at +1 978-922-6000.

Typical Operating Parameters

| Transmitter Application | Frequency Band | Peak Power Range | Average Power Range | Based On |
|---------------------------|----------------|-----------------------|---------------------------|---------------------|
| Weather Radar | S | 850 kW – 1000 W | 2 kW | Klystron, Magnetron |
| Weather Radar | C | 250 kW - 1000 W | 0.6 kW – 2 kW | Klystron, Magnetron |
| Weather Radar | X | 300 kW | 0.3 kW | Klystron, Magnetron |
| Industrial and Scientific | Ka | 100 W – 10 kW | 100 W – 10 kW (min) CW | Gyrotron |
| Industrial and Scientific | L | 90 kW | 6.4 kW | IOT |
| Industrial and Scientific | L | 30 kW | Adjustable (2 kW – 30 kW) | IOT |
| Instrumentation Amplifier | C | 60 kW | 3 kW | CCTWT |
| Instrumentation Amplifier | X | 15 kW – 17 kW | 600 W - 1020 W | CCTWT |
| Instrumentation Amplifier | L | 2 kW, 4 kW and 7.5 kW | 80 W, 160 W, 300 W | TWT |
| Instrumentation Amplifier | S | 4.2 kW and 8 kW | 250 W, 480 W | TWT |
| Instrumentation Amplifier | C | 4.2 kW and 8 kW | 250 W, 480 W | TWT |
| Instrumentation Amplifier | X | 5 kW and 8 kW | 300 W, 480 W | TWT |
| Instrumentation Amplifier | Ku | 3.2 kW and 6 kW | 192 W, 360 W | TWT |
| Instrumentation Amplifier | L-Q | 60 W – 2.2 kW | CW | TWT |
| Instrumentation Amplifier | L-K | 2 kW – 40 kW | Pulsed | TWT |
| Airborne and Surveillance | L-K | 250 W | CW | EW TWT |
| Airborne and Surveillance | J | 400 W | CW | TWT |
| Airborne and Surveillance | L-K | 100 W - 10 kW | CW | Booster TWT |