

## 2815-MHz, 4-kW CW Radio-Frequency Test Stand

A complete 2815-MHz, 4-kW CW radio-frequency (rf) test stand is utilized to test S-band waveguide components under CW power conditions. The test stand includes a 4-kW klystron and high-voltage power supply, a full-power output isolator, dedicated slow and fast rf interlock systems, a personnel protection interlock system, and a temperature-regulated de-ionized water source for component cooling. The system can operate in CW, ramped, or pulsed-rf mode.

### Examples of use:

- WR284 window testing
- Prototype Short-Pulse X-ray (SPX0) higher-order mode (HOM) damper testing and damper material characterization
- High-power tests on prototype SPX0 waveguide HOM damper
- Characterization of SPX0 klystron and ultra-low-ripple high-voltage power supply



S-band CW rf test stand