



FMCW Cloud Radars

Radiometer physics GmbH (RPG) has developed a line of polarimetric solid-state radars operating at 35 and 94 GHz for continuous cloud and precipitation observations.

- Accurate absolute calibration, hardware monitoring
- High spatial, temporal, and Doppler resolution
- Built-in passive radiometric channel for LWP estimation
- Rain mitigation system for keeping the radomes dry
- Data products: full spectra, moments, spectral polarimetry
- Optional scanner for volumetric processing
- Optional dual frequency configuration (35 + 94 GHz)
- Automated data exchange with RPG radiometers
- Turbulence, wind shear, fog, and cloud observations
- Particle size distribution, rain intensity, ice microphysics

Profiling Radiometers

The RPG-HATPRO (Humidity And Temperature PROfiler) is becoming the radiometer of choice for meteorological networks and forecasting systems all around the world.

- 14 channels (22 to 31 GHz, 51 to 58 GHz, 183 GHz optional)
- Superior direct detection technology: EMI / EMC, parallel
- Network suitable, control + data flow via Ethernet
- Data products: IWV, LWP, T + RH profiles, stability indices
- Better boundary layer T-profiling than radio-soundings
- Full-sky scanning (more than 200 directions in 9 minutes)
- Ground-based: complementing the satellite view!
- All-weather proof, reliable, robust... proven!
- IR radiometer extension for cloud base height detection

Scintillometers

RPG is the only commercial supplier for scintillometers observing in the microwave spectral region.

- Microwave scintillometer RPG-MWSC operates at 160 GHz
- Synchronous observation of sensible and latent heat fluxes (combined with optical Large Aperture Scintillometer)
- Network suitable, control + data flow via Ethernet



Dual polarisation
Dual frequency
Scanning **New**