

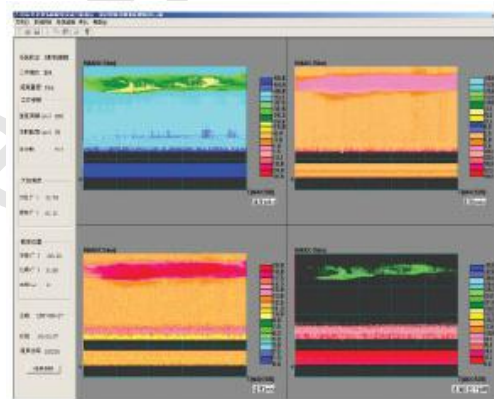
MOBILE MMW WEATHER RA13AR SYSTEM

The mobile millimeter wave (MMW) weather radar system is mainly used for detection & measurement of meteorological objects, such as clouds, fogs, ice crystals, sand-dust storms, gas-colloidal suspensions etc. This system has the features of high sensitivity, high airspace resolution capability, and high mobility. This type of weather radar can be combined with other weather radar to form the synthetic weather detection & measurement capability for clear airspace, non-precipitating clouds and precipitating clouds.



Main technical specifications

Operating frequency	Ka band
Detection range	Vertical direction: 100m~10km
Detection accuracy	Horizontal direction: 360~30km
	Range resolution: $\leq 50\text{m}$
	Echo Strength: $\leq 1\text{dB(RMS)}$
	Radial velocity: $\leq 1\text{ m/s(RMS)}$
Scanning area	Azimuth: $-185^{\circ} \sim +185^{\circ}$
	Elevation: $-1^{\circ} \sim +95^{\circ}$



INTEGRATED METEOROLOGICAL DETECTION RADAR

The radar, being a mobile one, includes such detection equipment as radio theodolite, boundary layer wind profile radar, wind profile solar and 6-element meteorological sensor. The radar serves mainly to measure the air temperature, air relative humidity, atmospheric pressure, wind speed, wind direction parameters of the ground, boundary layer and troposphere, in order to provide the real-time wind field information in the detection range of 5m~30km. The radar can be widely used for the meteorological support and observation activities such as meteorological support for test field, small-/ medium-scale meteorological analysis and forecast, atmospheric wind field observation and value forecast, meteorological support for large-scale activity, calamity meteorological service. The mobile radar is equipped with the GPS orientation and radio data transmission equipment and is characterized by convenient, flexible and mobile application. The radar provides a complete high-altitude meteorological detection



solution.