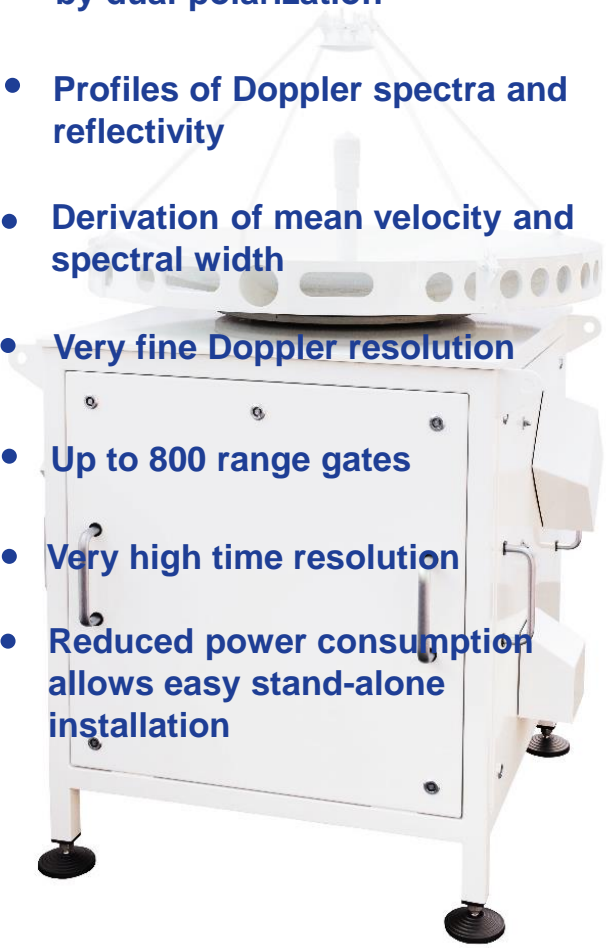


# Cloud Radar MIRA-35C



- Very compact tropospheric profiler for cloud observation
- Characterization of cloud particles by dual-polarization
- Profiles of Doppler spectra and reflectivity
- Derivation of mean velocity and spectral width
- Very fine Doppler resolution
- Up to 800 range gates
- Very high time resolution
- Reduced power consumption allows easy stand-alone installation



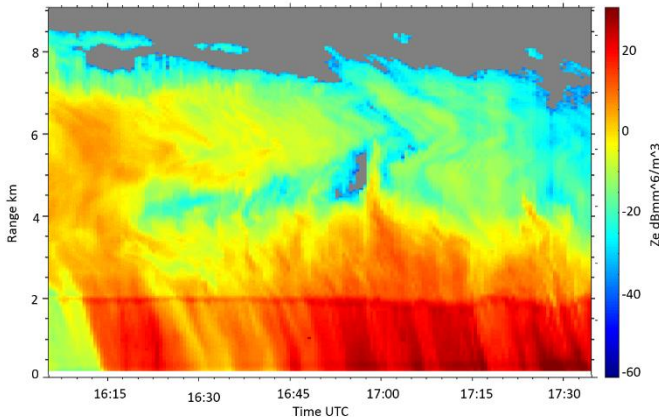
# Cloud Radar MIRA-35C

MIRA-35C is a compact and very price-competitive alternative to Metek's classical MIRA-35 as a limited reduction of sensitivity with respect to MIRA-35 is acceptable for most investigations of cloud structures, for example for cloud seeding and climatological studies.

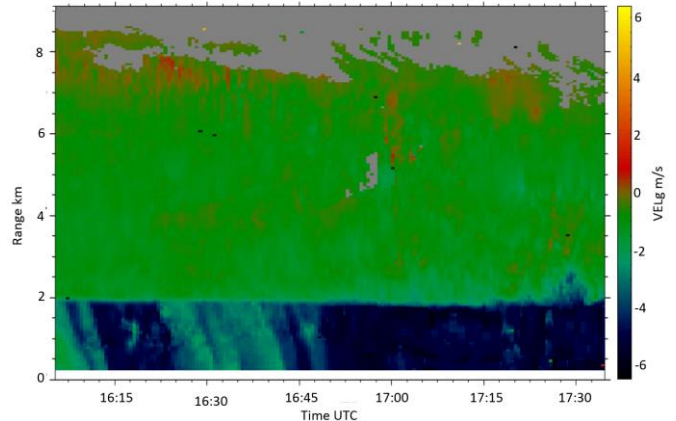
The radar electronic is accommodated in a hermetically sealed box, making handling, installation and operation as convenient as possible. The size of the complete radar is mostly dominated by the selected sizes of the Cassegrain antenna which are offered as 50 cm and 100 cm parabolic versions.

Due to the adapted transmit power, the MIRA-35C does not require air conditioning and waveguide pressurization, reducing efforts for installation, operation and maintenance.

Equivalent Radar Reflectivity Factor Ze of Hydrometeors 16:05 22.09.2015 – 17:34 22.09.2015 MIRA 35-C



Doppler Velocity VELg 16:05 22.09.2015 – 17:34 22.09.2015 MIRA 35-C



Transmit frequency	34.8 GHz ... 35.2 GHz, 35.2 GHz recommended by ECC
Peak power / average power	3 kW / 3 W
Sensitivity	- 53 dBZ (1 km range, 30 m range resolution and 10 s time resolution, 100 cm antenna)
Min. measuring range	100 m
Max. number of gates	800 (each in-phase and quadrature-phase)
Min. time resolution	0.1 s
Beam width	1 ° with 50 cm and 0.6 ° with 100 cm antenna
Antenna diameter	50 cm, 100 cm
Pulse width / range resolution	100 ... 400 ns / 15 ... 60 m
Pulse repetition frequency	2.5 ... 10 kHz
Velocity resolution	5 cm/s
Polarization parameters	Linear polarization on transmission, co and cross polarized signals are received simultaneously. LDR and co-/cross-correlation can be computed.
Dimensions of the radar electronics	L·W·H = 43 cm · 46 cm · 31 cm
Power consumption depending on the duty cycle	Radar: 100 ... 120 W PC + accessories: 75 ... 120 W

