

Pilotsonde Sounding System

The pilotsonde sounding system is used to measure wind direction, wind speed, altitude and pressure of the atmosphere. This system is highly automatic because it applies high-accuracy positioning of the GPS to track automatically the in-flight pilotsonde without radar tracking on the ground.

Technical Specifications:

Operating Frequency	400~406 MHz
The half-wave dipole antenna	
Type of Polarization	Horizontal Polarization
Antenna Gain	>5dB
Beam Width	>60° (3dB)
Antenna Standing Wave Ratio	<1.5
The directional Antenna	
Type of Polarization	Vertical Polarization
Antenna Gain	>7dB
Beam Width	
H Side Symmetrical	>60° (3dB)
E Side Asymmetrical(0~augmentation direction)	>50° (3dB)
Antenna Standing Wave Ratio	<1.5
Filter	

Band Width	403±3MHz (3dB)
Standing Wave	<2
Insertion Loss	<2dB
Switches	
Isolation	<-18dB
Insertion Loss	<1dB
LNA	
Gain	>22dB
Noise Figure	<1
Operating temperature (Outer Unit)	-40°C ∼+85°C
Cables between antenna and receiver	More than 30 m
Maximum wind speed	65m/s