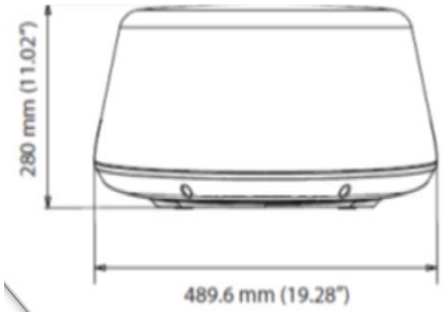
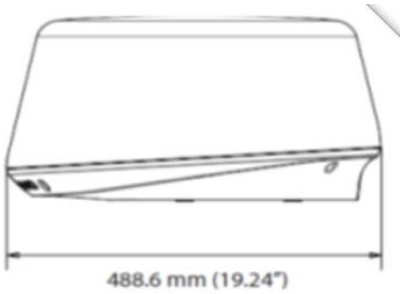
WEATHER RADAR CORE PRECIPITATION

DIMENSIONS





DESCRIPTION

The mini WCRP -1 radar is a weather radar which has a high technology.

Its structure of small size makes it a portable or fixed unit for easy installation.

This equipment can reach between 40 - 50 km, showing very accurately the nuclei of precipitation and storms in real time.

The WRCP1 has a very competitive price for available to users.

UTILITY WRCP-1

- Local monitoring of the formation of nuclei of precipitation.
- Surveillance agricultural fields.
- Sports and competition events.
- Mobile units of storm tracking surveillance.
- Defense system for tactical UAV units.
- Forest fires.
- Emergency vehicles.

KIT RADAR WRCP-1 INCLUDED

RADAR ANTENNA

POWER AND COMUNICATION BOX

PC LAPTOP/ TABLE COVER

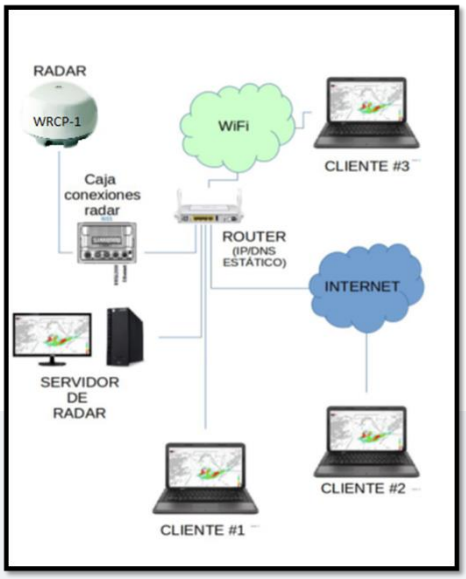
TRANSPORT BOX

(OPTIONAL)

OPTIONAL KIT FOR TURRETS MOUNTING/TELESCOPIC MASTS

- Steel bracket for installation of the radar antenna.
- Top toe of 180mm / 220 mm.
- Turret of 180mm / 220 mm de 3 mts.
- Fixed base plate or tilting 180 mm 220 mm turret.
- Turnbuckles, galvanized, braided wire cable ties.
- Lightweight telescopic masts portable / mobile units. (Consult)

RADAR CONNECTION DIAGRAM



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INSTALACIÓN MÓVIL

INSTALACIÓN FIJA

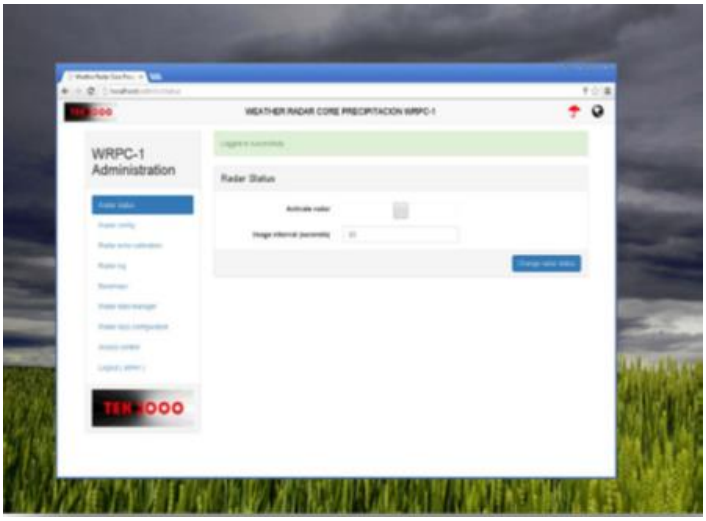
Diagram of meteorological radar system connections and image viewers.

The radar antenna is connected using a set of cables provided by the manufacturer to a connection box from which is provided the required electric power supply (see the radar antenna manual for more information).

This box provides connectivity via an Ethernet cable to a local router. This router can be the same one that is used to connect to the internet, for example, a router ADSL WiFi. The radar server must be connected also by an Ethernet cable to the same router or switch. This is the minimal installation needed to operate the radar and obtain the radar images using the screen attached to the radar server. If you also want to access to the radar image client from other computers, it is required to know the Ethernet IP of the radar server's. This connection may be by local network (in the figure, the customer #1 case), Using a WiFi network (customer #3), or by internet (customer #2). For to access by internet to your radar installation, it is required a static public IP in the router or, a DNS static that points to an IP dynamic. In addition, you will need to open TCP/IP port 80 so that it points to the internal IP of the server. This network configuration is the same one required by a web server. Request help to your internet provider to configure your router.

CONTROL RADAR WRCP SERVER SOFTWARE

1



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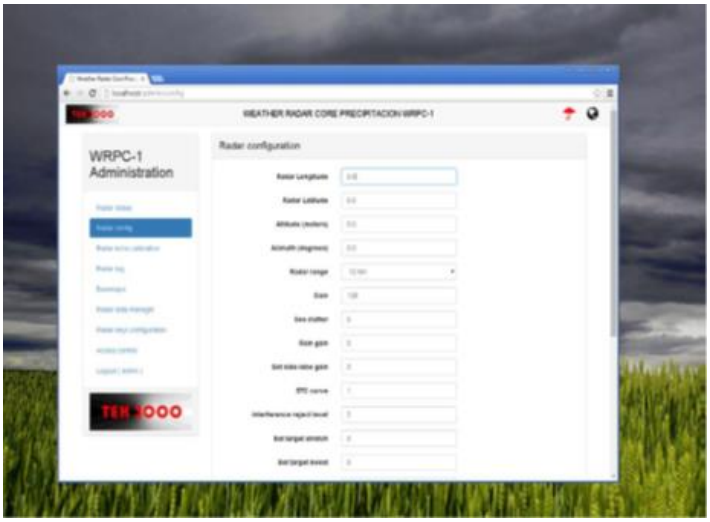

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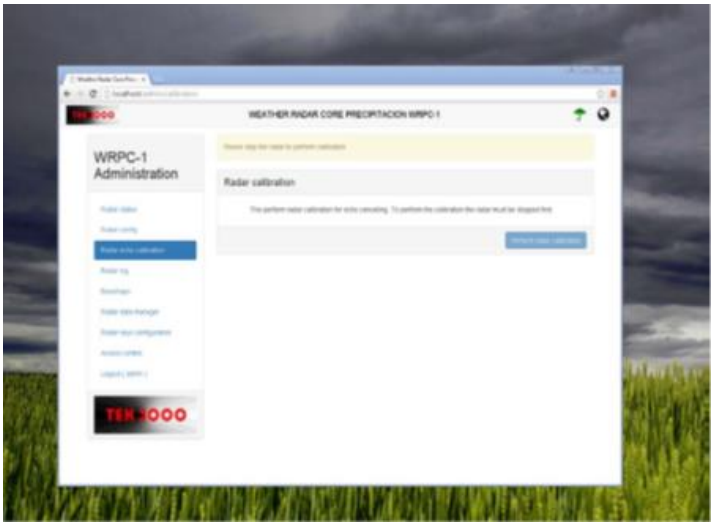

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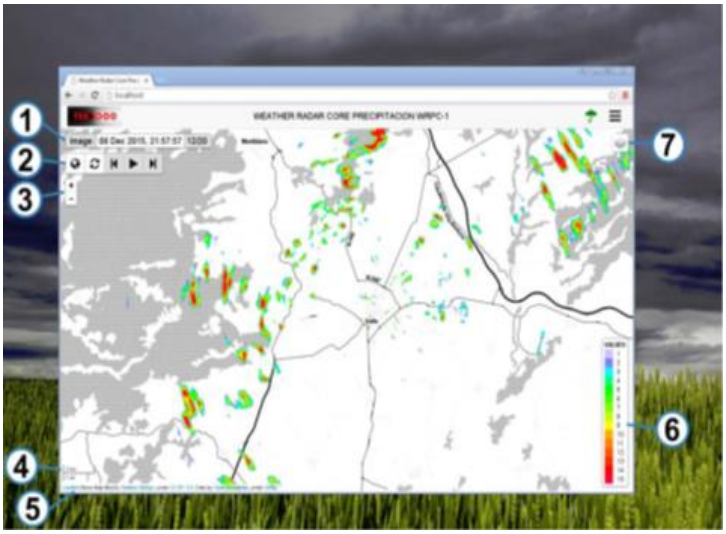

TECHNICAL DATA

FEATURES	TECHNICAL DATA
Conformity	CE, FCC (ID: RAY3G4G), IC: 4697A-3G4G
Environmental	IEC60945: 2002 Operating temperature: -25° to +55°C (-13° to +130°F) Relative humidity: +35° C (95° F), 95% RH waterproofing: IPX6
Relative wind speed	51 m/sec (Max:100 Knots)
Power consumption (with 10 m cable)	Operating: 20W a 21 W a 13.8Vdc Stanby: 2.9W a 13.8Vdc ~ 170mA
DC input (end of radar cable)	9 VDC to 31.2Vdc (12/24 V systems) Minimu input voltage 10.75Vdc
Transmitter source	No magnetrón – (Transistors)
External dimensions	Height 280 mm x Diameter 489 mm (Altura 11" x Diámetro 19.3")
Scanner weight (without cable)	7.4 kg (16.31 lbs)

RADAR ANTENNA PARAMETERS	
Radar range	50 m (200 ft) to 66 km (36 nm) con 18 range settings (nm/sm/km)
Rotation	24/36/48 rpm +/-10%
Transmitter frequency	X-band - 9.3 to 9.4 Ghz
Transmitter	No magnetrón (no preheating time)
Polarisation plane	Horizontal
Transmitter maximum	165 mW (nominal)
Sweep repetition frequency	200 - 540 Hz (dependent mode)
Sweep time	1.3 ms+/- 10%
Sweep bandwidth	75 MHz max
Ancho de haz horizontal (Tx and Rx antenHorizontal beamwidth (Tx and Rx antena)	5.2°+/-10% (-3 dB witdh)
Separation Control objetive	OFF: 5.2°+/-10% (-3 dB width) Bajo: ~4.4°+/-10% (-3 dB width) Medio: ~3.2°+/-10% (-3 dB width) Alto: ~2.6°+/-10% (-3 dB width)
Vertical Beamwidth (Tx y Rx)	25°+/-20% (-3 dB width)
Sidelobe level (Tx y Rx)	Below -18 dB (inside ±10°);Below de -24 dB (±10°)
Operating noise	Less than 6 dB

WIRING/ MOUNTAING	
Com protocol	High-speed Ethernet
RI10 connector	NMEA2000 / SimNet with imterface box RI10
Connection cable length	10 m (33 ft) Cable de B&G 20 m (65.6 ft)
Maximun cable length connection	30 m (98.5 ft) – available as option
Screws (4)	M8x30 - 304 stainless steel