### **SOLID STATE**



## **Compact X-band**

## **Doppler Weather Radar**



Model WR110

At last, Perfomance, Transportability and Reliability within everyone's reach!

#### A weather Radar for all situations



#### Cities

Local weather observation capabilities for optimal wastewater treatment efficiency, increased public safety and minimizing property loss through enhanced flood damage prevention control.



#### **Airports**

Observation and identification of approaching rainfall/snowfall around airports for improved traffic management and safety.



#### Mountains

Observation of rainfalls and their effect in mountainous areas allowing easier prediction of water flows for disaster prevention.

#### Transportability



WR110 on a trailer (example

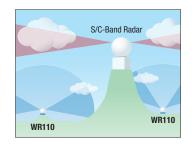
- Wide range of transportation choices
   Pickun Trailer Small trucks
- Heading sensor for azimuth adjustment\*
- Vibration isolator for safe relocation and transport\*

MIL-STD-810G Test Method 514.7 ANNEX C Category 4 Secured Cargo, Common carrier (US highway truck vibration exposure) Test1

WR110 case for easy transportation\*

\*Option

#### Large Radars (S/C-Band) supplement



The WR110 can supplement, reinforce and fill-in areas global surveillance weather radars cannot reach.

\*Example diagram of an efficient combination using WR110 X-Band Radar to detect local weather changes with high precision in lower elevation areas while large S/C band radars sweep higher elevations for longer range surveillance.

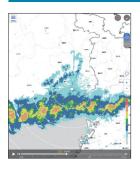
#### **Easy Installation**

- Very Compact and lightweight (1 m, 65 kg)
- No heavy equipment required
- Compatible with regular power outlet

#### **Reduced Operating Costs**

- Solid-State
- -Reliable, less maintenance, long life solid-state transmission device -Lower power consumption
- Radar status monitoring for optimized performance

#### Various software applications available



#### Rainnaut (Paid service)



 Easy monitoring with our standard WR110 visualization software

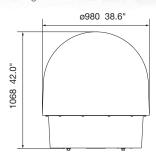
#### Various data format compatibilities

 Various data formats used in major software packages, such as Vaisala IRIS Focus and Baron Lynx, are available

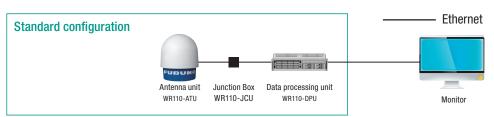
Model Name	WR110	
Antenna Polarization	Single polarization (Horizontal)	
Operating Frequency	9.4 GHz band	
Pulse Width	0.5 - 50 μs	
Pulse Repetition Frequency(PRF)	up to 2,000 Hz	
Beam Width	2.7 degrees	
Peak Output Power	100 W	100
Vertical Scan Angle	-2 to 182 degrees (adjustable)	A
Antenna Rotation Speed	0.5 – 10 rpm	18
Observation Range	70 km max.	
Scan Modes	PPI, Volume Scan, Sector PPI, Sector RHI	
Output Parameters	Reflectivity factor Zh (dBZ), Doppler velocity V (m/s),	_
	Doppler velocity width W (m/s), Rainfall intensity Rain (mm/h)	
Data Correction	Distance and Rain attenuation, Doppler Velocity Folding	
Doppler Speed	+/-64 m/s	-
Unwanted Signal Removal	Suppression of clutter from land, Interference Rejection	
Available Data Formats	CF/Radial, Opera Odim HDF5, CF-compliant NetCDF (rain only) Grib2 (rain only)	-
Operating Temperature Range	-10 to +50°C (Start-up), -20 to +50°C (In operation)	
Maximum Wind Survival Speed	90 m/s	-
Power Supply	100-240 VAC, Single phase, 50/60 Hz	
Power Consumption	350 W max., 200 W typ.	-

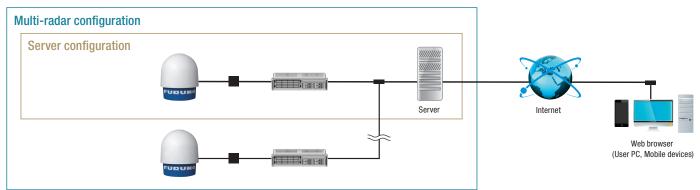


WR110 65 kg 143.3 lb

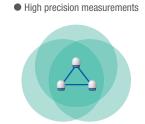


It can also be carried through narrow spaces (800 mm) if disassembled.





#### Multi-radar configuration for higher precision and reduced blind areas

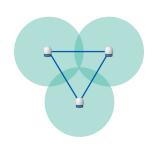


Reduced blind areas

Blind area Covered Rainfall detected

Signal power attenuation due to heavy rain (Blind areas can be covered by other WR110 radars)

Multi-radar configuration for increased observation range



Beware of similar products

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