



**STX-II SERIES
MODULAR RADAR**

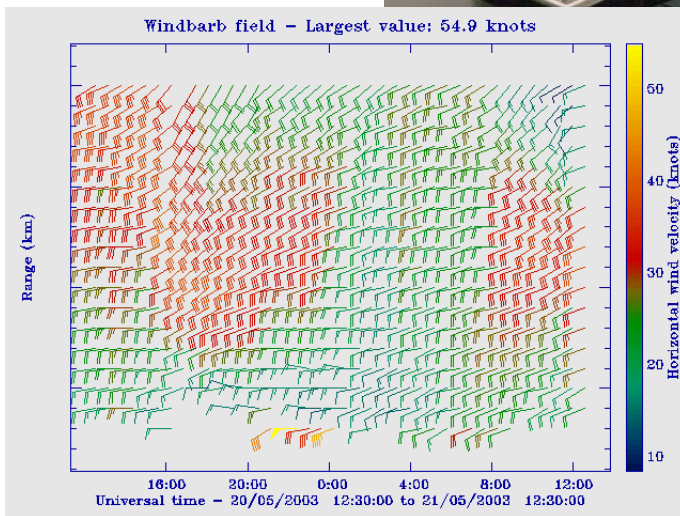
**BOUNDARY
LAYER
RADAR
WINDPROFILERS**

Radar Equipment Rack



KEY FEATURES:

- ◆ Boundary Layer wind profiling
- ◆ Small, medium & large array configurations
- ◆ Sampling range 300m—8km AGL
- ◆ Real-time Wind Profiles
- ◆ Low Operating Cost
- ◆ Fully Automated
- ◆ Unattended Operation
- ◆ Remote Monitoring & Control
- ◆ BUFR Output for easy Data Assimilation
- ◆ Unaffected by Precipitation, Bird or Insect Migration
- ◆ Small footprint (BLR/33)
- ◆ Portable (BLR/3)



Example Windbarb Display

BLR12/27 in use at Sydney International Airport

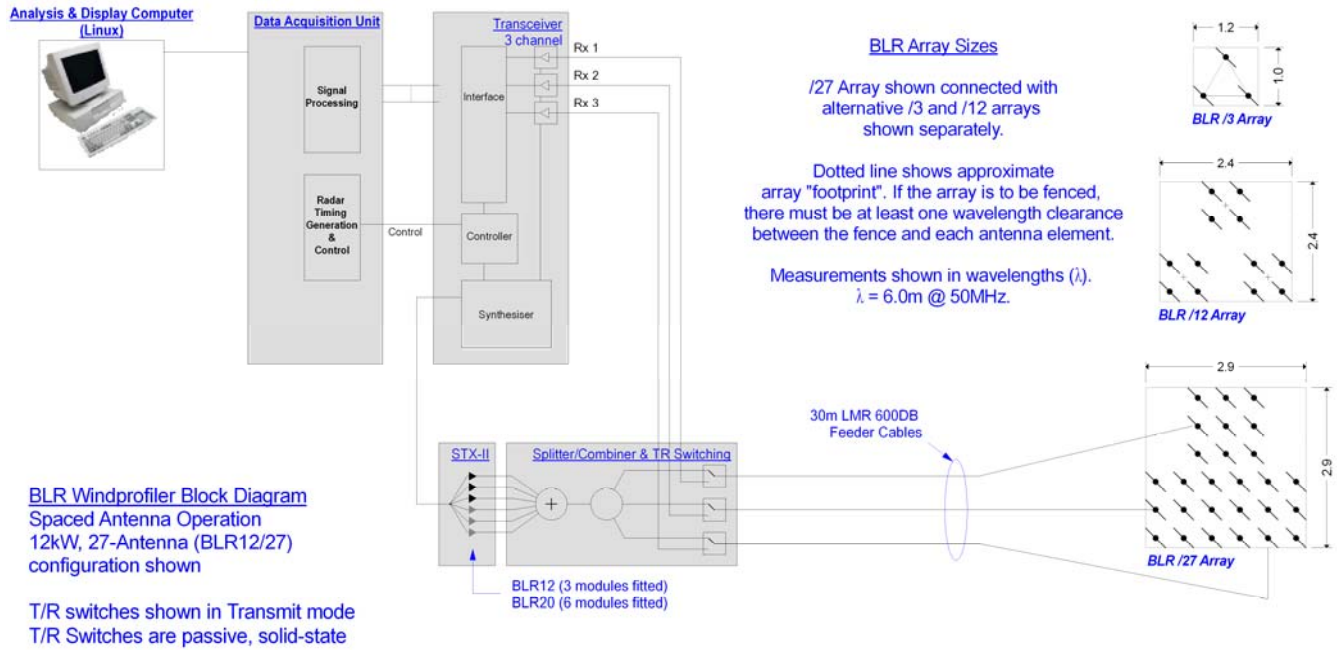


ATRAD wind profilers provide a highly cost-effective measuring solution with a very low total cost of ownership. Ongoing maintenance requirements are minimal, operation is unattended and there are no recurring consumable costs. Any number of radars may be remotely controlled from a central location. BUFR data output is provided to enable easy data assimilation into existing observation networks.

The ATRAD Boundary Layer Radar (BLR) Windprofilers provide real-time vertical profiles of horizontal wind speed and direction with maximum height coverage of 2-3km (BLR/3), 4-5km (BLR/12) & 6-8km (BLR/27). They operate in the low-VHF frequency range, providing significant cost benefits and eliminating data contamination arising from precipitation, birds or insects. They are well suited to aviation forecasting and now-casting operations or any application where real-time wind information is required. The BLR/3 can be field-deployed for applications such as wind-surveys, fire-weather, special events, etc.



For applications where height coverage below 300m is paramount, a BLR wind profiler can be integrated with an acoustic wind profiler (SODAR) to provide high-resolution information to as low as 10m above ground level.



SYSTEM CHARACTERISTICS	BLR /3	BLR /12	BLR /27
Radar Configuration	Boundary Layer/Tropospheric Windprofiler Spaced Antenna Operating mode 12 or 20kW Peak Transmitter power at 15% maximum duty cycle		
Operating Frequency Range	40-60 MHz (actual operating frequency fixed at time of manufacture)		
Antenna Configuration	3 Antenna	12 Antenna (3 groups of 4)	27 Antenna (3 groups of 9)
Antenna Footprint (@55MHz)	5.5m x 6.5m	12.0m x 13.1m	15.8m x 15.8m
Radar Receiver	Three coherent (complex) radar receiver channels		
Analysis modes & Displays	FCA: Full Correlation Analysis Wind Barb, Wind Field, Wind Profile, SNR Profile		
Remote Control	Remote monitoring and control via internet, ethernet or dialup modem connection		
Data Output	Standard ATRAD Data Format BUFR Format		
Observation Range (BLR12)	300m-4,000m (BLR12/3)	300m-6,000m (BLR12/12)	300m-8,000km (BLR12/27)
	<i>Note: Data is sampled over these ranges. Data availability at maximum height will be determined by selected radar operating parameters and atmospheric conditions and is subject to seasonal and diurnal variation. Minimum height coverage is affected by local clutter conditions</i>		
Range Resolution	User configurable from 100m to 600m Standard settings are 100m (low mode) and 300m (high mode)		
Options	Alternative Power Levels (contact ATRAD) GPS Time synchronisation Uninterruptible Power Supply Transmitter and Power Supply redundancy		



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FURTHER INFORMATION

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