### What is it?

The WeatherFile Communication Unit (WCU) provides the means of connecting weather sensors via GSM, WiFi or LAN to WeatherFile.com.

The WeatherFile data is accessed by any internet connected PC, tablet or smart phone. Data is viewed on WeatherFile.com (talk to us if you prefer viewing your data via your own website). Data is also directly accessible from the WCU's own WiFi\* on a local display page via its own IP address. The WCU has a micro SDHC card for long term storage of data and data backup if required.

#### What does it do?

#### The WCU is the hub of the WeatherFile Weather System.

By selecting your choice of sensor, the WeatherFile system is easily configured. The electronics are in a tough, weatherproof (IP67)\*\* enclosure with high quality connectors for ease of installation. In the event that the internet connection is lost, the WCU will continue to log data which will be retransmitted when communications are restored ensuring continuous data capture in a 'fit & forget' solution.

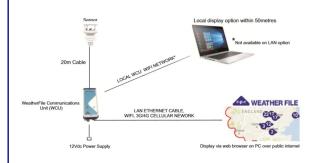
In addition, the WCU controls power to the system elements. Power savings can be made if, for example, a reading is needed just a few times a day or data only required remotely during working hours. To keep your data private (such as commercially sensitive data) or if the data is not applicable to a wider audience, an SSL secure login to a private area on the WeatherFile.com site can be provided. Please do not hesitate to contact us for help specifying the relevant wind/weather system to integrate with the WCU. We have a range of sensors to meet your needs, as well as accessory options such as alarms and displays.

# **Applications**

- Weather monitoring and warning
- •Temporary structures, stages, marquees, festivals, events
- Construction industry, including crane operations
- •Health and safety site operations
- •Marine and offshore
- •Wind farm surveying and operations
- •Roads, bridges and tunnels
- Agriculture and Horticulture
- Sports and outdoor activities
- Education and research projects
- •Site operations in aviation

\*Not available on LAN connected option \*\*Only on request for LAN connected option







# Weatherfile Communication Unit | WCU

Physical	
Enclosure Dimensions including Connectors	191 x 80 x 90mm
Enclosure Material	Polycarbonate UL94V0
Connections	Power: Binder 720 Series Sensor:Screwless Terminal Block via Cable Gland LAN: RJ45 via Cable Gland (LAN Version Only)
WCU Weight excluding Mounting and Cables	Mobile Version: 0.42kg WiFi Version: 0.39kg LAN Version: 0.45kg
Optional Pole Mounting Brackets	Stainless Steel. Maximum Pole Diameter 54mm
Optional Wall Mounting Brackets	Fixing Centres 91 x 168mm or 64 x 195mm

Wireless/Network C	Connectivity
Wi-Fi (1)	Wi-Fi Certified 2.4GHz IEEE 802.11b/g Security WPA2-PSK, WPA
Mobile 3G/4G (2)	LTE FDD: Band 1(2100 MHz)/Band 3(1800 MHz)/Band 7(2600MHz)/Band 8(900MHz)/Band 20(800 MHz),
	DC- HSPA+/HSPA+/HSPA/UMT S: Band 1(2100 MHz)/Band 8(900 MHz)
	EDGE/GPRS/GSM: Band2(1900 MHz)/Band3(1800 MHz)/Band 5(850 MHz)/Band 8(900 MHz)
	(Contact RPR Ltd for other options.)
LAN (3)	RJ45 connector 10/100 Base-T

#### Power

Power Requirement	12V DC +/-10%
Current @ 12V DC	300mA typical

## Sensor Input

Gill Instruments: WindSonic

& WindObserver Series,

	MetPak & MaxiMet series
	Calypso Wired & Wired BLE
	LCJ Capteurs CV7-V
	NMEA compatible wind sensors with RS232 output
	Please Contact RPR if you wish to use other sensors
Transmission Standard	RS232 and RS485 compatible, 8 bits and no parity

Sensor Types

# Data Storage

	Data Storage
Data Storage Card	Removable SDHC Card
Data Capacity	8GB (std.)
Remote Cloud Storage	Data stored on WeatherFile.com 2 years as standard.

### Environmental

Temperature Range	Operating: -10°C to +55°C Storage: -40°C to +70°C
Enclosure Protection	Mobile & WiFi Version IP67 LAN Version IP65

# Audible/Visual Indicators

LED Indicators	SD Card Status Data Input Status Wireless Connection Status
Power	Status Alert
Audio Bleeper	Status Alert

(1) Wi-FI & Mobile versions (2) Mobile version (3) LAN version

The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change.

