

A753 addWAVE GPRS

The A753 addWAVE GPRS has been developed as a universal remote telemetry unit (RTU) for applications requiring communications over the mobile phone network. It is compact, extremely rugged and has very low power consumption.

The unit combines high resolution input channels, flexible sampling modes and large memory size with integrated GPRS data communications. It is housed in a robust aluminium case. Sensor and power connections are made using waterproof Binder connectors. Power comes from an internal NiMH battery that is charged using a compact solar panel. A single use Lithium-Thionyl battery is also available.

Applications

- WMO-compliant weather recording
- Flood warning, dam monitoring
- Agriculture
- Water supply network monitoring
- Science, research & development



Technical data

Dimensions	160 x 60 x 80 mm	Resolution	16-Bit @ 0 - 2.5 V ; 2x 50Hz and 2x 500Hz pulse counter
Weight	1,200 g	Wind Port C	measures wind 4x per second and calculates 3-sec. average
Ingress Protection class	IP-67	Rain Port D	time stamps every pulse
Temperature range	-30°C to +65°C	Digital events	records and time stamps every status change on a digital input
Case	powder-coated aluminium	Operating time (without charging of internal battery)	in standard mode up to 21 days, in power-save mode up to 6 months; depends on slot-time, transmission rate, and sensors
Screw connections	flange sockets of nickel-plated brass, stainless cover screws	Frequency range	850 / 900 / 1800 / 1900 MHz
Connectors (all connectors IP67 if properly mated or capped)	4x Binder M9 7-pin to sensors 1x Binder M9 5-pin to solar cell / power supply 1x TNC Antenna connector	Rx Sensitivity	-106 dBm
Power supply	6.2 V NiMH battery 3.1Ah + solar cell / mains adapter	Tx Output Power	max. 2 W (depends on frequency)
I/O-Ports	12x analog in (0 - 1/2.5 VDC ; including 3x 0 - 150mV) 4x pulse counter 4x digital in/out (0 - 3V TTL) 40x SDI-12 values	Transmission distance	max. 36km as per GSM standard
Sensor excitation	- unregulated batt. 5.6V ... 7.2V - regulated from 3.3V ... 5.5V	Expansion (optional)	internal Modbus IF via RS 485
Sampling interval	user specific (from 10sec. to 12h)	Antenna	omnidirectional quad-band, 2dBi
Measuring methods	simultaneous / sequential	Type approvals	ACMA Australia, Industry Canada, R&TTE, FCC Part 15, etc.
Internal memory	2MB for up to 500.000 values	Ordering information:	
		100.753.010	A753 addWAVE GSM/GPRS
		200.733.522	Solar Panel, 460mA