

# Technical Data

## A850 Base Station 5



### with A440 + 30m CAN cable

- **Device type**  
Telemetry Gateway
- **Product highlights**  
Embedded Linux operating system; Java web application with graphical user interface; Backup battery to survive up to 20 hours of power outage; 1GB memory which allows to store data of 200 RTU's for approx. 4 weeks; Manages a network of up to 1000 RTU's; Co
- **IP-communication**  
Fully integrable into ethernet network
- **Interfaces**  
2x USB; 1x 100MBit Ethernet; 1x RS-232; 1x RS-485 (to A440 Wireless Modem)

### The System

The A850 Telemetry Gateway is the core of every ADCON monitoring network, be it a pure GSM / GPRS network, a UHF radio network or a combination of both - it's the A850 that knows exactly when and how to retrieve data from each RTU.

A network consisting of only GSM / GPRS RTU's requires only the A850 Telemetry Gateway, while a network using UHF radio RTU's also requires an A440 Wireless Modem. The A850 is available in several versions, managing from 5 up to 1.000 RTU's. Each version can easily be upgraded by software to support more RTU's.

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A850 Telemetry Gateway	
Dimensions	182 x 260x 52 mm
No. of RTUs supported	up to five RTUs, UHF and GPRS/UMTS
Expandability	Expansion options to 100 RTUs, 250, 500 and even 1.000
RA440 support	1 RA440 can be connected; optional expansion to up to 10 RA440s
Weight	1.862g
Connectors	1 x 100Base-T Ethernet 1 x RS-232 (ext. modems) 1 x RS-232 (Console) 1 x RS-485 (Radio Modem) 2 x USB (ext. modems) 1 x Mains Power
Analog Modem	external via USB or RS-232
Micro Processor	Cirrus Logic 32-bit ARM
Memory	1GB Flash, 32MB RAM
Operating System	Linux OS 2.4 Kernel
Power Supply	90 ... 240 V AC; an integrated 8.4V NiMH battery with 4.500mAh serves as uninterruptible power supply
Operating Temperature	-10°C ... +55°C

A440 Wireless Modem	
Dimensions	119 x 79x 60 mm
Weight	590g
Connectors	1 x RS-485 to connect to A850 1 x TNC to antenna
IP Protection	IP67
Power Supply	via the RS-485 connection to the A850 Telemetry Gateway
Mounting	Mast mounting bracket
Operating Temperature	-30°C ... +60°C
Tx Output power	500mW e.r.p.
Rx Sensitivity	-120dBm (10 dB S/N)
Channel spacing	10 / 12.5 / 25 kHz (factory preset)
Antenna	Omni-directional, 0dB
Antenna connector	TNC with external seal
Frequencies	430 ... 470MHz (in 4 bands of 10MHz each)
Approvals	R&TTE, CE, FCC, Ind.Canada, AUS