

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 |