

Technical Data

A850 Telemetry Gateway



The Core

- Device type**
 Base Station for Adcon Wireless Sensor Networks
- Product highlights**
 Manages up to 1000 Adcon RTUs, easy to operate via graphical user interface, integrated uninterruptible power supply (max. 5h), 1GB data memory sufficient for 200 stations for 4 weeks, embedded Linux OS
- IP-communication**
 Connects seamlessly into Ethernet networks
- Interfaces**
 2x USB; 1x 100MBit Ethernet; 1x RS-232; 1x RS-485 (to A440 Wireless Modem)

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.

| A850 Telemetry Gateway | |
|------------------------|--|
| Dimensions | 182 x 260x 52 mm |
| 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 |

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| | |
|-----------------------|---|
| 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 | IP-67 |
| 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, ACMA Australia |