

A850 Telemetry Gateway

The A850 Telemetry Gateway forms the heart an Adcon monitoring system. The A850 acts as a mid term storage device for data collected from Adcon's UHF radio and mobilke phone (GPRS) based remote telemetry units (RTUs). The unit is built around an embedded Linux operating system for reliable 24/7 operation. An integrated UPS ensures interruption-free operation throughout power outages.

The A850 communicates with radio RTUs (A723, A724, A733, etc.) via an A440 Wireless Modem. Data from GPRS RTUs is fed from the provider's broadband data service via the units' Ethernet port. The A850 also supports up to 10 Remote A440 units. These may be used to service clusters of radio RTUs in remote areas, with data returned to the A850 via a GPRS connection.



A web interface is used to configure the A850 and to set up the parameters for the individual RTUs. Data can be retrieved either through its 100MBit Ethernet port or an external USB modem. Integrated diagnostics scan RTUs for potential malfunctions, with a range of log files available for trouble shooting.

Technical data

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|--------------------------|---|---|--|
| Dimensions | 259 x 186 x 47 mm (W x D x H) | Operating time off internal battery | Depending on number of RTUs and polling interval up to 20 hours |
| Weight | 1.500 g | Number of RTUs supported | 5 / 100 / 250 / 500 / 1.000 (of which up to 200 can be UHF) |
| Ingress Protection class | IP-50 | Number of external radio modems supported | up to 10 modems of type A440 and / or RA440 |
| Temperature range | -10°C to +55°C | External analog modems supported | max. 2 |
| Case | steel, painted | RTU polling intervals | from 1x per minute to 1x per week |
| Connectors | 2x USB 1x 100MBit Ethernet 1x RS-232 1x RS-485 (to A440) | Diagnostics | RF signal strength; transmission success rate; transmission delay; battery voltage |
| Power supply | 90 - 230VDC mains 9V NiMH battery 4.000 mAh | Type approvals | CE, FCC, ACMA Australia |
| Operating System | Embedded Linux | Ordering Information: | |
| Configurator | web-enabled Java application; provides GUI for setting all RTU parameters | 100.850.053 | Base Stations with A440 Radio B3: A850 Base Station 5 RTU |
| Data viewer | Integrated graph and table | 100.850.057 | A850 Base Station 25 RTU |
| Internal memory | 256MB on CF card; stores data of 200 RTUs for approx. 1 week; 1 million read/write cycles | 100.850.055 | A850 Base Station 250 RTU |
| Data retrieval | through Adcon's XML-based addUPI protocol (OPC upon request) | 100.850.006 | Base Stations without A440 Radio: A850 Base Station 25 RTU |
| | | 100.850.003 | A850 Base Station 250 RTU |