

A850 Telemetry Gateway

The A850 Telemetry Gateway forms the heart of an Adcon monitoring system. The A850 acts as a mid-term storage device for data collected from Adcons UHF radio and cell phone (GPRS) based remote telemetry units (RTUs). The embedded Linux operating system ensures reliable operation 24/7, while an integrated UPS provides interruption-free operation during power outages.

The A850 communicates with radio RTUs (A723, A724, A733, A753) via an A440 Wireless Modem. Data from GPRS RTUs is fed from the providers broadband data service via the unit's 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 being 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

Dimensions	259 x 186 x 47 mm (W x D x H)	Operating time off internal battery	Depending on number of RTUs &
Weight	1.500 g		polling interval - up to 20 hours
Protection class	IP-50	Number of RTUs supported	5 / 100 / 250 / 500 / 1.000 (of which up to 200 can be LIHE)
Temperature range	-10°C +55°C		(of which up to 200 can be UHF)
Case	steel, painted	Number of ext. radio modems supported	up to 10 modems of type A440 and / or RA440
Connectors	2x USB 1x 100MBit Ethernet 1x RS-232 1x RS-485 (to A440)	External analog mo- dems supported	max. 2
		RTU polling intervals	from 1x/minute to 1x/week
Power supply	90 - 230VDC mains 9V NiMH battery 4 Ah	Diagnostics	RF signal strength; transmission success rate; transmission delay; battery voltage
Operating System	Embedded Linux	T 1	
Configurator	web-enabled Java application with GUI for all configuration options	Type approvals	CE, FCC
		Ordering Information	
Data viewer	Integrated graph and table	100.850.001 100.850.002 100.850.003 100.850.004 100.850.005	A850 Gateway for 5 RTUs A850 Gateway for 100 RTUs A850 Gateway for 250 RTUs A850 Gateway for 500 RTUs A850 Gateway for 1.000 RTUs
Internal memory	1GB on CF card; stores data of 200 RTUs for approx. 4 weeks; 1 million read/write cycles		
Data retrieval	through Adcons XML-based add- UPI protocol	100.850.051	A850 Base/5 + A440 Radio B1 A850 Base/5 + A440 Radio B2
Time settings	through internal real time clock module or external NTP server	100.850.051 100.850.051	A850 Base/5 + A440 Radio B3 A850 Base/5 + A440 Radio B4