

RA440 Remote Wireless Modem

This device is the bridge between two worlds - UHF radio and GPRS. RA440 was built for all those cases where a network of UHF measuring stations needs to be built in an area which is not covered by a GSM network and/or which offers no possibility to install a base station (A850 Telemetry Gateway).

Installed within coverage of a GSM network the RA440 feeds data from a number of UHF remote telemetry units (RTUs) through a single GPRS connection back to an A850 Telemetry Gateway. Up to 10 RA440's can be connected to one A850 Telemetry Gateway (for which a license upgrade may be required).

Depending on the number of sensors per monitoring station and the desired update interval you can connect up to 20 RTUs to an RA440. Power comes from one or two internal batteries, charged by a solar panel, or an external 12V source.

The RA440 accepts standard SIM cards for GPRS data transmission. Ask your Adcon distributor for assistance to calculate the data volumes for your application.



Technical data

Dimensions	8.94 x 6.61 x 4.61 in. (H x W x D)	UHF Frequency ranges	Band 4: 460 - 470MHz (others from 430 - 460 upon request)
Weight	7.3 lb. (incl. antennas)	UHF Channel spacing	10 / 12.5 / 25kHz
Ingress Protection class	IP-67	UHF Rx Sensitivity	-120 dBm (10 dB S/N)
Temperature range	-4°F ... +158°F	UHF Tx Output Power	500mW
Case	powder-coated aluminum	UHF Transmission distance	max. 12miles (depends on topography and type of installation)
Connectors (IP67 if properly mated or capped)	1x Binder M9 5-pin to solar cell 1x UTS 2-pin to external 12V DC source	UHF Antenna	omnidirectional, +2dBi, with 19 ft. cable and mast mounting kit
Power supply internal	1 x 6.2 V NiMH battery 3.1Ah, charged by solar cell; optionally a second battery can be installed	Type approvals	FCC Part 15, Industry Canada, R&TTE, ACMA Australia, etc.
Power supply external	12V DC, e.g. standard car battery	Ordering information	
GSM modem	Motorola G24L	100.440.004	RA440 Wireless Modem Band 4
GSM frequencies	800 / 900 / 1800 / 1900 MHz	200.733.522	Solar panel 460mA
GSM Tx Output power	max. 2W depending on frequency	200.800.025	Y cable 5-pin to second solar panel
GSM antenna	omni-directional, +2dBi, TNC	800.000.270	Spare battery, 3.1Ah, NiMh
GSM transmiss. distance	max. 22miles acc. to GSM standard	800.440.001	Cable to external 12V battery