

RA440 Remote Wireless Modem

Adcon's RA440 Remote A440 Wireless Modem provides an economical way to expand a radio telemetry network. The unit combines the UHF radio capabilities of an A440 Wireless Modem with a cellular phone modem, allowing it to be used as a bridge or concentrator, feeding data from a number of UHF remote telemetry units (RTUs) back via a single GPRS connection to an A850 Telemetry Gateway.

Power comes from one or two internal batteries, charged by a solar panel or an external 12V source.

Depending on the number of sensors per monitoring station and the desired update interval you can connect up to 20 UHF RTUs to an RA440.

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



Technical data

Dimensions	227 x 168 x 117 mm (H x W x D)	UHF Frequency ranges	Band 1: 430 - 440MHz Band 2: 440 - 450MHz Band 3: 450 - 460MHz Band 4: 460 - 470MHz
Weight	3.300 g (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	-20°C ... +75°C	UHF Tx Output Power	500mW
Case	powder-coated aluminum	UHF Transmission distance	max. 20km (depends on topography and type of installation)
Connectors (all 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 6m cable and mast mounting kit
Power supply internal	1 x 6.2 V NiMH battery 3.1Ah, charged by solar panel; optionally a second battery can be installed	Type approvals	ACMA Australia, Industry Canada, R&TTE, FCC Part 15, etc.
Power supply external (optional)	12V DC, e.g. standard car battery	Ordering information	
GSM modem	Motorola G24L	100.440.001	RA440 Wireless Modem Band 1
GSM frequencies	800 / 900 / 1800 / 1900 MHz	100.440.002	RA440 Wireless Modem Band 2
GSM Tx Output power	max. 2W depending on frequency	100.440.003	RA440 Wireless Modem Band 3
GSM antenna	omni-directional, +2dBi, TNC	100.440.004	RA440 Wireless Modem Band 4
GSM transmission distance	max. 36km according to GSM standard	200.733.522	Solar panel 460mA
		800.000.270	Spare battery, 3.1Ah, NiMh
		800.440.001	Cable to external 12V battery