iG8 GNSS RTK Receiver
Power Consumption Notes

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Each battery is specified as 3,400 mAH @ 7.4 V; 24.48 Watt Hours

There are two batteries possible in the iG8 for a total of 48.96 Watt Hours

There are several common operation methods, each uses a different power.

You can expect a head, running at 70 degrees F with two brand new, fully charged batteries to last between 8 hours 40 minutes and 11 hours 20 minutes depending on the run mode and radio configurations.

Empirically we have measured power consumption associated with different internal functions that can be disabled/enabled:

Backlight	0.24 Watts
GPRS ON	0.11 Watts
GPRS Connected to NTRIP	0.84 Watts
UHF Radio ON receiving corrections	1.07 Watts
Wi-Fi ON	0.53 Watts

The base power (lowest possible power) is measured with Backlight OFF, UHF Radio OFF, GPRS OFF, Wi-Fi OFF and Bluetooth ON:

Lowest	4.32 Watts

> When considering the times listed below, remember that lower ambient temperatures will result in shorter run times and the tests have been conducted with brand new, fully charged batteries that have endured only a few charge cycles. In other words, these times are optimum run times and are not warranted across operating temperature and battery age. Your results will vary.

UHF Rover

Configuring a UHF Rover with SurvCE leaves:

Wi-Fi ON
GPRS ON but disconnected
UHF Radio ON

The average power consumption is 5.64 Watts. The calculated run time on one battery is 4.34 hours. The empirically observed run time is 4.35 hours per battery.

On two batteries, run time is 8.68 hours (8 hours 40 minutes).

Optimization of UHF Rover

Turn off the GPRS radio (from the Wi-Fi interface), then turn off the Wi-Fi radio (from the Wi-Fi interface or the front panel). Saves 0.64 Watts, power consumption drops to 5.00 Watts.

On two batteries, run time is 9.79 hours (9 hours 47 minutes).

DCI (Data Collector Internet)

Configuring a DCI Rover with SurvCE leaves:

UHF Radio OFF
GPRS ON but disconnected
Wi-Fi ON

The average power consumption is 4.96 Watts.

On two batteries, run time is 9.87 hours (9 hours 52 minutes).

Optimization of DCI Rover

Turn off the GPRS radio (from Wi-Fi interface), turn off Wi-Fi interface (from the Wi-Fi interface or the front panel). Saves 0.64 Watts, power consumption drops to 4.32 Watts.

On two batteries, run time is 11.33 hours (11 hours 20 minutes).

Internal GSM

Configuring an 'Internal GSM Rover' with Carlson leaves the Wi-Fi ON. If you turn off Wi-Fi from the front panel the power consumption is 5.16 Watts.

On two batteries, run time is 9.49 hours (9 hours 29 minutes).