SprintIR Dynamic Power Requirements

Bench-tested results for ultra-low power requirement usage.

Covers Models:

GC-0013 (2,000ppm) GC-0014 (5,000ppm) GC-0008 (10,000ppm)



GC-0018 (0-100%) GC-0019 (0-60%) GC-0017 (0-20%) GC-0009 (0-5%)



Dynamic power requirements become important when operating from a USB port where the supply current might be being shared over several ports (we recommend using powered USB hubs to avoid these potential power issues) or when planning for low power applications like solar power.

When the power is applied to the sensor, initially a higher than normal operating current demand will occur. This inrush current and period will relate to the impedance of the power supply and device switching power.

The measurements below were taken whilst connected to a USB port via a USB to UART bridge cable, 3.3 volts, streaming / poled mode, same interval of measurement on a COZIR sensor:

Quiescent: 300 uA

Measurement interval: 500 mS
Measurement period: 20ms
Measurement current: 30 mA
RMS operating power: 2 uW

Startup inrush current 50 mS @ 60 mA peaks

