

The uGI1B is a reliable low cost interruption controller designed for use with cathodic protection rectifiers. Precise timing accuracy and repeatability is attained with GPS and microprocessor technology. Compact single package construction and a wide operating temperature range make this device ideally suited for corrosion field survey activities.

### Features:

- Completely self-contained including integral GPS antenna
- Small physical size: 3.1" in diameter 1.2" high (79x31mm)
- Event data logging of site geolocation, interruption activities and interruption faults (fault & load current logging require a smart relay)
- User selection of 10 configurable interruption profiles
- Configurable on/off times (0.1 to 59.999 seconds, 1mS steps)
- Scheduler with time of day start / stop & daily repeat functions
- Selectable on or off start phase for interruption
- Profiles permanently stored in non-volatile memory
- Holds rectifier power on when not interrupting
- Auto-resume after power disruption
- Supports mercury, mechanical and solid-state relay types
- Configurable relay dwell times provide precise output timing
- Supports normally open and normally closed relays
- Selectable AC line sync provides low primary current inrush
- Interruption output control signal provides 12VDC @ 0.5A
- Wide-temperature LCD for local status display
- Lightning, surge and overvoltage protected
- Externally powered: 6VAC to 36VAC or 8VDC to 52VDC
- Operating temperature: -30°F to +158°F (-22°C to +70°C)
- Pad lockable for enhanced security
- Magnetic mounting feet for attachment to ferrous surfaces
- IP65 weatherproof non-submersible enclosure
- A high performance 72 channel GPS engine with integral high gain antenna provide superior GPS reception
- Timing accuracy +/-0.5mS (AC line sync disabled), +8.8mS / -0.5mS (AC line sync enabled)
- Top of the minute time synchronization using GPS
- Communicates with an optional solid state smart relay which provides real-time current measurement and interruption monitoring
- USB connection to Windows PC for configuration, data logger extraction and firmware upgrades
- Can be configured with free Apple or Android application through Bluetooth® Smart
- Solid state components provide high reliability
- Low equipment cost

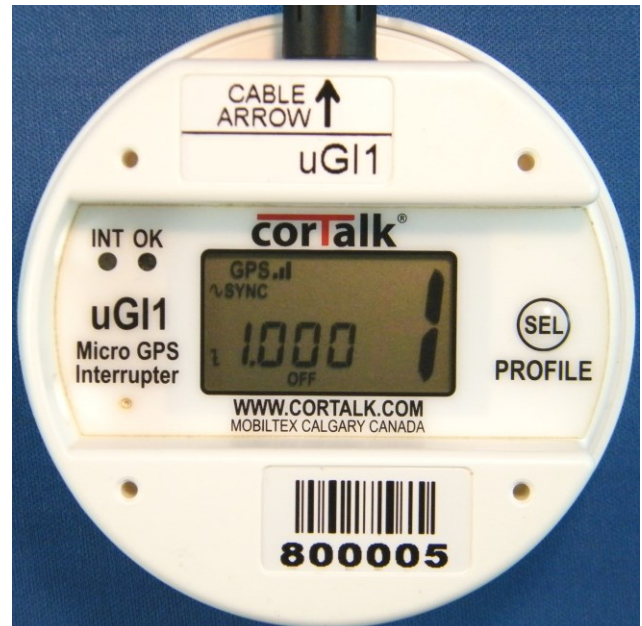
**A20A03UGI01** Micro GPS interrupter kit - no relay. Includes: uGI1 Micro GPS Interrupter, 6.5 ft (2 mtr) cable uGI to user supplied relay, & fabric carrying case c/w 1 year warranty.

**A20A03UGI02** Micro GPS interrupter kit – c/w SRL1 smart relay. Includes: uGI1 Micro GPS Interrupter, SRL1 smart solid state relay on micro heatsink 30A (50A with optional medium heatsink) 0-90VDC 0-70VAC, & fabric carrying case c/w 1 year warranty.

**A20A03UGI03** Programming kit for uGI1. Includes 3.2 ft (1 mtr) long USB cable and USB drive with PC configuration software.



Top side view



Bottom side control panel view (actual size)



Mounted on rectifier cabinet

The SRL1 smart relay is a low cost solid state interruption switch designed to operate with the uGI micro GPS current interrupter. This product combination is used to precisely interrupt cathodic protection rectifiers during corrosion field survey activities. The SRL1 continuously monitors the load current, synchronization status and relay temperature. The uGI produces a time stamped event log which includes the measured load current, relay temperature, switch status, interruption parameters, and geolocation information. The log also identifies fault conditions such as low load current, overload, over temperature, low supply voltage and loss of GPS sync.

## Features:

- Continuously monitors AC or DC load current
- Interruption switch capacity 0-90 VDC or 0-70 VRMS AC
- No minimum voltage or minimum current switching restrictions
- Current switching capacity: 30A with micro heatsink, 50A with medium heatsink, or 60A with large heatsink
- 10 milliohm on resistance provides low loss switching
- Lightning, surge and overvoltage protected
- Solid state components provide high reliability
- uGI event data logging of load current, synchronization status, switch state, site geolocation, and interruption parameters
- uGI event log includes fault conditions such as low load current, over temperature, overload, low supply voltage and loss of GPS sync
- LED indicators provide real-time local status information
- A user programmable low current set point provides low load current or open load fault logging and local LED indication
- Auto shutdown with fault log recording for overload and over temperature conditions. Auto resumes after fault is corrected
- Can be powered from rectifier taps, batteries, or solar / TEG sources
- Supply input: 6VAC to 36VAC or 8VDC to 52VDC
- Low power consumption. The uGI and SRL require approx. 1 watt
- Distributes power to the uGI which eliminates the need for redundant external power connections
- Small size: 4.4" x 2.4" x 0.7" (110x62x18mm) with micro heatsink
- Operating temperature: -30°F to +158°F (-22°C to +70°C)
- Auto-resume after power disruption
- Low equipment cost

**A20A03UGI02** Micro uGI1 GPS interrupter kit – c/w SRL1 smart relay. Includes: uGI1 Micro GPS Interrupter, SRL1 smart solid state relay on micro heatsink 30A (50A with optional medium heatsink) 0-90VDC 0-70VAC, & fabric carrying case c/w 1 year warranty.

**A1506031501** SRL1 Solid State Smart Relay c/w micro heatsink: 30 Amps 0-90VDC 0-70VAC (included with A20A03UGI02 kit)

**X03912B150A** Medium heatsink for SRL1 smart relay. Increases SRL1 capacity to 50 Amps

**X030320HE90** Large Heatsink for SRL1 - HE-90. Increases SRL1 capacity to 60 Amps



SRL1 on micro heatsink – 30 Amps 0-90VDC / 0-70VAC



SRL1 on medium heatsink – 50 Amps 0-90VDC / 0-70VAC



SRL1 on micro heatsink – A1506031501