# Graphite<sup>™</sup> Module: HSPA+ Cellular

Red Lion Automation Series



### High-Speed HSPA+ Cellular Communication

The HSPA+ plug-in module expands the communication reach of our Graphite HMI operator interface panels by providing a high-speed cellular connection to remote assets.

The new module uses an HSPA+ cellular network to provide reliable high-speed data communication to remotely-located assets across oil and gas, water and wastewater, power, utility and alternative energy applications. Configure the HSPA module using Red Lion's Crimson® software, which makes setup simple via an intuitive graphical user interface with drag-and-drop functionality.



#### **APPLICATIONS**

- > Alternative Energy
- > Oil & Gas
- > Power
- > Utility
- > Water and Waste Water

#### **PRODUCT HIGHLIGHTS**

- > Remotely Monitor and Control Assets
- > High-Speed Cellular Data Connection
- > Removes Need for External Gateways
- > All-in-One Solution, Easily Programmed

### **FEATURES & BENEFITS**

- > Remote Monitoring and Control
  - Reliable high-speed cellular communication to monitor remote equipment and processes
  - Leverage powerful Graphite HMI functionality through virtual HMI
  - Receive real-time email or SMS notifications
- > All-in-One Solution
  - Removes need for external devices and communication gateways
  - · Cost-effectively saves space and time

- > -30° to 60°C Operating Temperature
  - Reliably works in harsh environments
- > Powered from Graphite Host
  - Simplifies deployment by eliminating external power
- > Easily Programmed
  - Seamless configuration using Red Lion's Crimson desktop software





## ►►► HSPA+ Cellular Module Specifications

#### **POWER**

GMHSPA Power Consumption:

 $\begin{array}{l} \mbox{HSPA+ Mode: 3.5 W avg. (5.4 W max)} \\ \mbox{GPRS Mode: 8.5 W avg. (15 W max)} \end{array}$ 

#### **COMMUNICATION PROPERTIES**

HSPA+ with Fallback Capability to 3G and 2G Maximum Speeds: downlink 21 Mbps, upload 5.76 Mbps Antenna Isolation from Graphite host device 500 VDC for 1 minute

#### **ANTENNA CONNECTOR**

One (1) SMA Female Connector on module

Requires 50 Ohm antenna with SMA male connector Penta-band HSPA+ antenna (850/900/1700/1900/2100 MHz) global Dual-band antenna (850/1900 MHz) US and Canada Dual-band antenna (900/2100 MHz) Europe

#### **CERTIFICATIONS AND COMPLIANCES**

CE Approved:

EN 61326-1 to Industrial Locations IEC/EN 61010-1 RoHS Compliant

#### **ENVIRONMENTAL**

Operating Temperature Range: -30 $^{\circ}$  to +60 $^{\circ}$ C Storage Temperature Range: -40 $^{\circ}$  to +85 $^{\circ}$ C

Operating and Storage Humidity: 85% max relative humidity,

non-condensing
Altitude: Up to 2000 meters

#### **ORDERING GUIDE**

PART NUMBER	DESCRIPTION
GMHSPA00	Graphite Module, HSPA+ Cellular Module
6ANT0113	2G/3G 3" Hinged Antenna
6ANT1081	2G/3G/4G LTE Low Profile Direct Permanent Mount Antenna, IP67 Rated
6ANT1072	2G/3G 4.5" Whip Magnetic Mount Antenna, IP65 Rated
6ANT3011	2G/3G Low Profile Direct Permanent Mount Antenna, IP65 Rated

#### **DIMENSIONS** In inches (mm)





