



Actual size (23 mm x 41.4 mm)

## SiFLEX™ 900 MHz 802.15.4 / 6LoWPAN Module

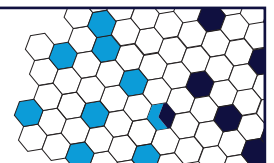
### PRODUCT DESCRIPTION

The SiFLEX02-R2 RF module integrates a high performance 900MHz IEEE 802.15.4 radio (AT86RF212B & RF amplifier circuit) and microcontrollers (ATXMEGA256A3U) in a cost effective, pre-certified footprint.

The module comes preloaded with the LSR host serial interface running on top of the Atmel 802.15.4 MAC. Easily load the 802.15.4 MAC onto the module and create your own network. Full debug and programming capabilities are included to develop custom applications.

### FEATURES AND BENEFITS

- Supports 802.15.4 / 6LoWPAN
- Standard (250 mW) and High-Power (750 mW) options available
- Industrial operating temperature: -40° to +85°C
- FCC (USA), IC (Canada) Module Certification
- Based on Atmel ATXMEGA256A3U
- LSR serial interface based on 802.15.4 MAC
- Multiple antenna options available
- License options available to purchase or integrate modular design



## SIFLEX MODULE PERFORMANCE

SPECIFICATION	VALUE
Footprint	23 mm x 34.5 mm
Operating Temp	-40 to +85° C
Operating Voltage	2.0 V to 3.6 V
Transmit Power	24 dBm, 40 kbps
Sensitivity	-102 dBm, 1% PER, BPSK 40 kbit/s

For full specifications on SiFLEX02-R2, please refer to datasheet.

## SIFLEX-HP MODULE PERFORMANCE

SPECIFICATION	VALUE
Footprint	23 mm x 34.5
Operating Temp	-40 to +85° C
Operating Voltage	2.5 V to 3.5 V
Transmit Power	27.0 dBm, 40 kbps
Sensitivity	< -104 dBm, 1% PER, BPSK 40 kbit/s

For full specifications on SiFLEX02-R2-HP, please refer to datasheet.

## ORDER INFORMATION

PART NUMBER	DESCRIPTION
450-0123	SiFLEX02-R2 with U.FL Connector
450-0124	SiFLEX02-R2 with Wire Antenna
450-0125	SiFLEX02-R2 with Helical Antenna
450-0126	SiFLEX02-R2 with RF Castellation for off-board antenna option
450-0131	SiFLEX02-R2 Development Kit
450-0127	SiFLEX02-R2-HP with U.FL Connector
450-0128	SiFLEX02-R2-HP with RF Castellation
450-0132	SiFLEX02-R2-HP Development Kit

These LSR products are all REACH and EU ROHS compliant.

KEY FEATURES
FLEXConnect™ for simple network set-up and deployment with inter-node distances of up to 2 miles
Standard (250 mW) or High Power (750 mW) option available
On-Module MCU with 256K Flash memory
Preloaded with the LSR host serial interface, or easily load the 802.15.4 MAC to create your own network

LSR is the leader in Wireless Product Development, offering true end-to-end solutions through its array of services and technical expertise.



### Design Services

LSR delivers complete system solutions from concept to manufacturing. We are your wireless M2M solutions partner, providing complete turnkey services and solutions.

- RF Design/Engineering
- Software/Firmware Design
- Antenna Design
- Industrial Design
- Mechanical Engineering



### EMC Testing & Certification

At LSR, we understand it is critical for your company to have a compliant product supported by the appropriate documentation, ready for deployment into the market. LSR provides the experience and knowledge to provide quality test services that meet your timeline and budget.

- On-Site FCC / IC /CE EMC Certification
- Wireless & Antenna Testing
- EMC Testing
- International Testing Services

LSR offers the fastest, lowest cost



### Wireless Products

way to add wireless capabilities to your product concept. LSR's fully-certified modules and antennas accelerate your time-to-market and support the full breadth of communication technologies, including:

- Wi-Fi\*
- Bluetooth\*
- Bluetooth\* Smart
- 802.15.4 & proprietary protocols