

## FloLink™ Radio Communication Unit



### General Description

The Willowglen FloLink™ unit provides a spread-spectrum radio or cellular communication link for Willowglen's FloLog™ Gas Well Flow Logger. The low cost FloLink™ unit is a very versatile solution and can accommodate a wide variety of remote gas well flow measurement applications and topographical conditions. With its hazardous area certification and low power consumption, the FloLink™ unit is the perfect choice for communicating with gas well sites.

The FloLink™ unit typically operates with Willowglen's FloLog™ device, a base station radio and a SCADA host computer. The FloLink™/FloLog™ combination provides a completely battery powered solution for remote measurement and reporting of gas well field data. software for user defined processing and control algorithms. Using PAC™, custom timing, logic and calculation functions are easily implemented.

### Features

- Provides communications from a FloLog™ device to a SCADA host computer using a spread-spectrum radio link or GSM/GPRS cellular network.
- Extremely Energy Efficient
- No solar panels required
- Uses 900 MHz or 2.4 GHz license-free (in many countries) ISM bands.
- Easy to install
- Hazardous Location Approved
- On-site configuration available using an RS-232 serial port

# FloLink™ General Specifications

## Standard Radio Communications

- **Radio Option:** Spread-Spectrum (Frequency Hopping) direct FM
- **Frequency:** License-free (in many countries) ISM bands, 902-928 MHz or 2.4-2.4835 GHz
- **Transmitter Power:**
  - 100 mW for 900 MHz band
  - 50 mW for 2.4 GHz band
- **Receiver Sensitivity:**
  - 114 dBm for 900 MHz band
  - 105 dBm for 2.4 GHz band
- **Range for Line of Sight with Yagi Antenna:**
  - Up to 32 km (20 miles) for 900 MHz band
  - Up to 16 km (10 miles) for 2.4GHz band
- **Data Rate:** 9600 baud
- **Serial Interfaces:**
  - RS-485 port for interface to FloLog™ device
  - RS-232 port for on-site configuration with a laptop computer
- **Status Indicators:** Power, Rx Data, Tx Data
- Point-to-Multipoint network configuration
- Single radio repeater capability
- FCC (USA) and Industry Canada Approved

## Repeater Radio Option

- Dual spread-spectrum radios and antennas
- Capable of multi-level repeater modes
- Solar charger and sealed rechargeable battery
- Hazardous Area Approved: Class I, Div 2  
Each repeater includes an interface for a local FloLog™ device.

## Optional Communications

- GSM/GPRS Cellular
- 1 Watt 900 MHz Spread-Spectrum Frequency Hopping Radio
- **Receiver Sensitivity:** -110 dBm
- **Frequency:** 902-928 MHz
- **Advanced Security:** 256-bit AES encryption
- **Range for Outdoor Line of Sight:**
  - Up to 22 km (14 miles) with dipole antenna
  - Up to 64 km (40 miles) with Yagi antenna

## Power

Self contained set of six “D Cell” long-life alkaline batteries provides enough power to run the unit for a full year under normal conditions

## Environmental

- **Operating Temperature:** -40°C to +60°C
- **Storage Temperature:** -40°C to +80°C
- **Hazardous Area Approved:** Class I, Div 2
- Certified to CSA-C22.2 No. 1010 series E79-11-95 Exn IIB T3 [Ex ia] associative equipment.

## Mechanical

- **Weight:** 4.3 kg (9.5 lbs.) including batteries
- **Size:** 254 mm x 203 mm x 127 mm (10 in. x 8 in. x 5 in.)
- **Environmental Rating:** NEMA 4X Enclosure
- **Mounting:** Clamp to 2 inch vertical pipe
- **Antenna Connector:** Type N coaxial receptacle with surge protection
- **Conduit Connection:** ½ NPT

For additional information on specific configurations and pricing, please contact Willowglen Systems Inc.

VISTA and PAC are trademarks of Willowglen Systems Inc.  
November 2009

Specifications subject to change without notice.  
Printed in Canada



WILLOWGLEN SYSTEMS INC.  
8522 DAVIES ROAD  
EDMONTON, ALBERTA  
CANADA, T6E 4Y5

Tel: +1 (780) 465-1530  
Fax: +1 (780) 465-0130  
email: [marketing@willowglen.ca](mailto:marketing@willowglen.ca)  
Website: [www.willowglen.ca](http://www.willowglen.ca)