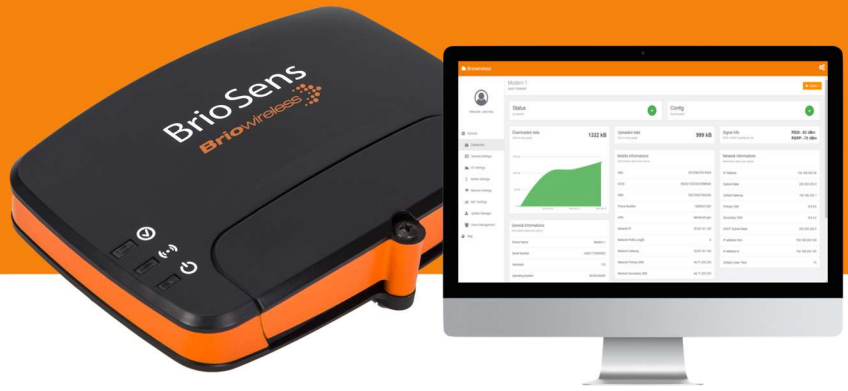


# BrioSens™ IIoT Control & Monitoring Solution



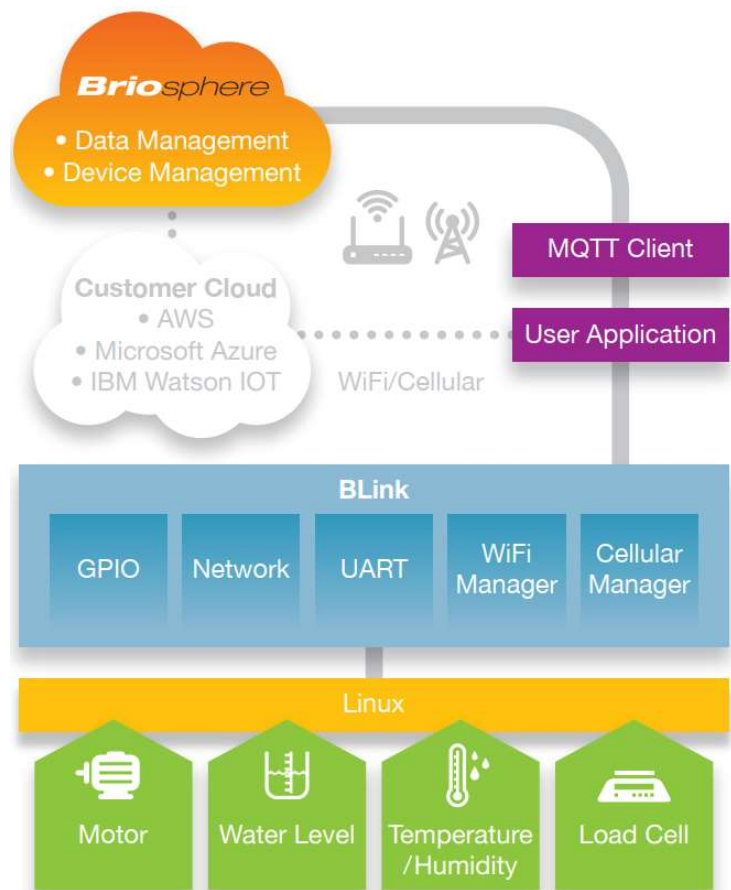
## BENEFITS

- Easy to deploy wireless gateway with remote sensor monitoring
- Pre-loaded with BLink™ to report the sensors data to BrioSphere™ with no software development
- Connected to BrioSphere™ cloud service or use any other third-party platform
- Linux based open platform with pre-installed development applications
- Water Resistant enclosure (IP65)
- Certified Multi-band cellular radio
- Wi-Fi & Bluetooth LAN built-in
- RS-232
- Digital and Analog sensor inputs

**Fully certified platform for Industrial IoT applications! Easy to deploy, simple to use, flexible connectivity with remote sensor monitoring and reporting.**

**BrioSens™** is a fully integrated sensor monitoring and communications gateway incorporating a powerful processor, certified WWAN and WLAN technologies, multiple user configurable analog & digital inputs with IP65 enclosure designed for tough environments.

**BrioSens™** is pre-loaded with **BLink™** a cross-language RPC based framework to get access to the hardware easily through sockets with few lines of code.



4434 Desserte sud (A-440)  
Laval, Québec, H7T 2P7  
(450) 681-2779  
info@briowireless.com

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# BrioSens™ IIoT Control & Monitoring Solution

SPECIFICATION		BrioSens™
<b>Processing Power</b>		
Processor	ARM9 core - 454MHz	
RAM	128MB (70% available for user application)	
Flash Memory	512MB (60% for user application)	
<b>Programming &amp; Management</b>		
Linux	Linux 4.4.6	
Pre-installed software	Systemd, Busybox, Gdb, Gdb server, Strace, Curl, Bluez-utils 5, Sqlite3, QT-Embedded 5.7	
<b>RF WWAN (selectable by product)</b>		
LTE-4G/3G Cellular Bands	LTE Cat.1 (4G) 700, 850, 1700/2100 (AWS), 1900MHz; UMTS/HSPA+ (3G) 850, 1700/2100(AWS), 1900MHz	
Antennas	Internal	
SIM Slot	x1, Industry standard 3FF micro-SIM	
<b>RF WLAN (on-board)</b>		
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz, 80Mbps (TCP), 100Mbps (UDP)	
Bluetooth	Bluetooth 4.1 + BLE (Smart Ready), 2.4GHz, supports master and slave configurations	
Antennas	Internal	
<b>Serial RS232 Interface</b>		
UART	RS232 standard; Rx, Tx, RTS, CTS	
Baud Rate	300-115Kbps, user configurable protocol parameters	
<b>Input Power</b>		
External power supply input	12Vdc ±10%, 1.0A max.	
<b>Digital Inputs</b>		
Inputs	x4 independent	
Type	Dry contact, TTL/CMOS	
Max. Input Voltage	24Vdc	
Max. Pulse Count	1000pps	
<b>Analog Inputs</b>		
Inputs	x4 independently configurable	
Input range	Full scale; 0 to 24Vdc, -1mA to 3.5mA source/sink	
Input gain	Independently adjustable by software	
Resolution & sample rate	12 bit ADC (10 bit ENOB), bandwidth: 1600Hz	
Current Loop input	4 to 20mA	
<b>Sensors (Internal)</b>		
Temperature	-40C to +85C ±1C (limited by operating temperature)	
Humidity	0 to 100% R.H. ±5%	
<b>Visual Indicators</b>		
Power	Green LED	
CPU Status	Green LED	
User defined	Green/Red LED; software configurable	
<b>Environmental</b>		
Storage Temperature	-40C to +85C	
Operating Temperature	-20C to +70C (extended temperature -40C to +85C option available)	
Ingress Protection	IP65 rating on specific models	
<b>Physical</b>		
Overall Dimensions	14cm x 9.5cm x 3cm (l x w x h)	
Weight	202 g	
<b>Regulatory Approvals &amp; Compliance</b>		
Cellular Industry	PTCRB, AT&T, other (contact Briowireless for latest list of approved carriers)	
Emissions	FCC Part 15 Subpart B Class B, IECS-003 Issue 5:2012 class A	
Immunity	EN55024-2010	
ROHS	Directive 2011/65/EU compliant	
Warranty	3 years	
<b>BrioSens™ Model</b>		<b>Description</b>
BSNS-43G1-US-BIW		BrioSens™ Gateway 4G-LTE Cat.1/3G (UMTS) Radio, Wi-Fi, Bluetooth, Internal Antennas, <b>IP65</b>
BSNS-4T1-USV-BIW		BrioSens™ Gateway Verizon (US) LTE Cat.1 Radio, Wi-Fi, Bluetooth, Internal Antennas <b>IP65</b>
BSNS-NA-BIW		BrioSens™ Gateway with no RF WWAN Radio, Wi-Fi, Bluetooth, Internal Antennas, <b>IP65</b>