

LogBox Connect provides the connectivity and data acquisitions solution for any type of application, due its different wireless models is the entrance for the connected world.

Wireless communication, large autonomy and flexibility for sensor types are the highlights of LogBox Connect. Large display, mobility and easy installation completes the value added.

Configuration and data downloading can be performed by mobile device or computer.





LogBox BLE

## **Bluetooth Multi Channel Data Logger**

- √ Monitoring for applications demanding battery-powered operation
- ✓ Configuration and data downloading via USB or Bluetooth
- ✓ Full operation with 4 AA alkaline batteries (or 10~30 Vdc power supply)
- √ Bluetooth data Communication using mobile application NXperience Mobile
- √ Autonomy up to 2 years with batteries
- ✓ Buzzer Alarms

#### **Applications:**







Cold Chain



**Data Centers** 



LogBox Wi-Fi

3G

## Wi-Fi Multi Channel Data Logger

- ✓ Monitoring of distributed and large facilities with existing Wi-Fi infrastructure
- ✓ Configuration and data downloading via USB or Wi-Fi
- √ Alarm notification by email
- √ Wi-Fi data communication using NXperience, cloud systems, SCADA or NOVUS Cloud
- ✓ Modbus TCP and MQTT protocols

#### **Applications:**



Distribution Centers



Cold Chain



Refrigeration

# 3G/2G Multi Channel Data Logger

- Monitoring in mobile or outbound distributed applications
- ✓ Configuration and data download via USB or 3G
- ✓ Alarm notification by SMS
- ✓ Internal rechargeable backup battery for up to 8 hours of autonomy
- ✓ Data transmission via 3G cell network using NXperience, SCADA or NOVUS Cloud
- √ Version with GPS for data with geolocation

#### **Applications:**



Services



**Sensible Products** in Transportation Greenhouses



Agricultural





## Configuration and data downloading

#### **COMPUTER**

NXperience software is the main tool for configuration and data download of LogBox Connect. All parameters and features can be adjusted, making NXperience the complete tool for data analysis, graphical view, mathematical formulas creation and report issuance.

NXperience can download data from several LogBoxes in customer facilities.





#### **SCADA**

LogBox Wi-Fi and LogBox 3G models can be used as monitoring elements from SCADA system.

LogBox Wi-Fi has ModBus TCP protocol, available in most SCADA for market, and MQTT protocol, emerging standard for IoT. For LogBox 3G, NOVUS provides a DLL/API which can be integrated to communication driver from SCADA or to be integrated in dedicated applications.



#### MOBILE DEVICE

NXperience Mobile is a mobile application that can be used in mobile devices, it is the ideal tool for daily operations such as monitoring, data downloading or configuration of LogBox BLE and LogBox Wi-Fi, taking advantage of wireless communication mobility. With NXperience Mobile, it is possible to configure, diagnose and collect multiple registrars.









#### **CLOUD PORTALS**

All data from LogBox Connect, LogBox Wi-Fi e LogBox 3G can be transmitted directly application to cloud portals, like NOVUS Cloud.

This platform, IoT compatible, allows to store and present variables like temperature, humidity, pressure, flow, geolocation or any other variable, monitored and recorded by LogBox Connect.



### **Technical Features**

	LogBox BLE	LogBox Wi-Fi	LogBox 3G
Input Signal	1 digital input 3 analog inputs	1 digital input 3 analog inputs	1 digital input 2 analog inputs
Type of Analog Signal	ThermocouplesJ, K, T, N, E, R, S, B, Pt100, 0-50 mV, 0-5 V, 0-10 V, 0-20 mA, 4-20 mA	ThermocouplesJ, K, T, N, E, R, S, B, Pt100, 0-50 mV, 0-5 V, 0-10 V, 0-20 mA, 4-20 mA	ThermocouplesJ, K, T, N, E, R, S, B, Pt100, 0-50 mV, 0-5 V, 0-10 V, 0-20 mA, 4-20 mA
Function of Digital Input	Counts Pulses, Records Events or Starts Logger	Counts Pulses, Records Events or Starts Logger	Counts Pulses, Records Events or Starts Logger
Digital Output	1 PNP output (Eletronic Switch or Alarm)	1 PNP output (Eletronic Switch or Alarm)	1 NPN output (Alarm)
Internal Sensors	NTC for temperature, battery voltage and external power supply	NTC for temperature, battery voltage and external power supply	NTC for temperature, battery voltage and external power supply
Display	3 lines with 4½ digits	3 lines with 4½ digits	3 lines with 4½ digits
Resolution	15 bits	15 bits	15 bits
Memory Capability	140.000 records	140.000 records	140.000 records
Record Interval	1 s to 18 h	1 s to 18 h	10 s to 12 h
Variable Record	Instantaneous or average	Instantaneous or average	Instantaneous or average
Acquisition Trigger	Date/Hour, Start button, digital input or by software	Date/Hour, Start button, digital input or by software	Date/Hour, Start button, digital input or by software
Alarms	8 Alarms (two per channel) Low and High	8 Alarms (two per channel) Low and High	Up to 10 alarms Send by SMS
Internal Buzzer	Yes	Yes	Yes
Communication Interface	USB Bluetooth 4.1 (BLE)	USB Wi-Fi 802.11 b/g/n	USB Cellular 3G
Configuration Software	NXperience Mobile for Android and iOS NXperience for Windows	NXperience Mobile for Android and iOS NXperience for Windows	NXperience forWindows
Communication with SCADA or Cloud system		MQTT, Modbus TCP protocols and NOVUS Cloud	NOVUS Cloud and SCADA
Power Supply	10-30 Vcc	10-30 Vcc	10-30 Vcc
Backup Battery	4 AA alkaline piles Typical autonomy 2 years	4 AA alkaline piles Typical autonomy 2 years (without Wi-Fi)	Internal backup battery Typical autonomy 2 hours
Operation Temperature	W/ power supply: -20 to 70 °C (-4 to 158 °F) W/ AA batteries: -10 to 50 °C (14 to 122 °F)	W/ power supply: -20 to 70 °C (-4 to 158 °F) W/ AA batteries: -10 to 50 °C (14 to 122 °F)	W/ power supply: -20 to 70 °C (-4 to 158 °F) W/ AA batteries: 0 to 45 °C (0 to 113 °F)
Enclosure Protection	IP40	IP40	IP40
Dimensions	120 x 100 x 40 mm (4.72" x 3.94" x 1.57")	120 x 100 x 40 mm (4.72" x 3.94" x 1.57")	120 x 100 x 40 mm (4.72" x 3.94" x 1.57")

# **Working Frequencies and Transmission Power\***

Frequency Range (MHz)	Output (W)	Emission Designator	Distances (m)**
824.0 - 849.0	1.58489	240GXW	3.0
824.0 - 849.0	1.34896	245GXW	3.0
824.0 - 849.0	0.69183	243G7W	3.0
1850.0 - 1910.0	0.77625	248GXW	3.0
1850.0 - 1910.0	0.63096	247GXW	3.0
1850.0 - 1910.0	0.53703	245G7W	3.0
1852.0 - 1908.0	0.56364	4M06F9W	3.0
1852.0 - 1908.0	0.60256	4M06F9W	3.0
1852.0 - 1908.0	0.57943	4M06F9W	3.0
826.0 - 847.0	0.42855	4M06F9W	3.0
826.0 - 847.0	0.54828	4M05F9W	3.0
826.0 - 847.0	0.53951	4M06F9W	3.0



<sup>\*</sup>This table only applies to LogBox-3G and LogBox-3G-GPS devices
\*\*Effective Radiated Power-ERP and Equivalent Isotopic Radiated Power-EIRP tests were made using amplitude modulation system.