


**FIONet™**

# Starbox LX2

**Starbox LX2** is an innovative smart Linux based RTU, specifically designed for remote gas station control in harsh environmental conditions.



**Starbox LX2** embodies the typical characteristics of a data logger with advanced multimedia features. In fact, it is a system where process control, multimedia capabilities, remote management and the internet are available and usable with identical operating standards and can be activated in a simple and intuitive way.

### Remote multimedia and multi-access communication with operational centres

Remote connectivity can be supported by means of different technologies, such as GPRS, 3G, 4G, ADSL, Wireless Network and Radio Modem.

It can be easily connected to station PLC, local instrumentation and supervisors, as well as SCADA operational centres by means of a wide range of communication protocols.

Local connection possible through ETHERNET, RS232, RS485 and USB.

### Embedded PLC

The integrated programmable controller allows the development of local control logics, for maximum flexibility and versatility of use.

### Integrated multifunctional web server

It allows connection to the device through use of WEB browser for consultation of station live data and device configuration.



City gates



District stations

Features	Values
Digital Inputs	16 DI 10-30 V DC opto-isolated and with 2500 V galvanic isolation
Digital outputs	8 DO 10-30 V DC opto-isolated and with 2500 V galvanic isolation
Analogue inputs	8 AI 16 bit 4-20 mA / 0-10 V DC with 2500 V galvanic isolation
Analogue outputs	1 AO 16 bit 0-10 V DC with 2500 V galvanic isolation
Expandability	up to 160 DI, 64 DO, 32 AI, 16 AO with MODBUS RS485 / RS422 / ETHERNET
Communication ports	<ul style="list-style-type: none"> <li>• 1x RS232</li> <li>• 1x RS232 / 485</li> <li>• 2x RS485 / 422</li> <li>• 1x Ethernet 10/100 Mbps</li> <li>• 1x USB</li> </ul>
HMI	<ul style="list-style-type: none"> <li>• Local 7" colour touch screen LCD display (optional)</li> <li>• 6 x 18 alphanumeric local display with 5 keys (optional)</li> <li>• Embedded web server</li> </ul>

Features	Values
Power supply	10 - 30 V DC
Typical consumption	2 - 4 watt
Case	Aluminium
Ingress protection	IP 20
Environmental conditions	from -20° C to +80° C from -4° F to +176° F
Memory Expansion	SD card / USB
Dimensions	170 x 155 x 60 mm 6.7 x 6.1 x 2.4 inches
Automation	Embedded PLC with ladder logic standard IEC 61131-3
Protocols and standards for remote communications	<ul style="list-style-type: none"> <li>• MODBUS RTU/TCP</li> <li>• SNMP</li> <li>• IEC 62056-21</li> <li>• IEC 60870-5-101/104</li> </ul>
Communication modes	<ul style="list-style-type: none"> <li>• Real-time</li> <li>• Batch</li> <li>• File transfer FTP</li> </ul>
User messages	SMS / e-mail
Alarms	<ul style="list-style-type: none"> <li>• Analogue inputs: programmable over and/or under thresholds</li> <li>• Digital inputs: programmable physical/logical states</li> <li>• Diagnostic</li> <li>• Custom variables</li> </ul>
OPC connectivity	OPC UA server
Configuration	From PC via "Rainbow Configurator" fast software
User Application	Using LADDER/C++ languages in a Linux environment
Operating system	Linux embedded

**Table 1** Features

## Starbox LX2 competitive advantages



Multimedia and multi-access connectivity



Integrated functions for pressure regulation and energy efficiency



Modular and scalable I/O configuration



Low energy consumption



Extended programmability through Embedded PLC



VPN-based encrypted communication