REMOTE MANAGEMENT FOR M2M COMMUNICATION

DATASHEET   **FBOX-500**

Designed to meet the needs of remote control and management of technical installations, the FBOX-500 remote management PLC combines multiple functions: remote alarm, telemetry, remote metering, remote control, archiving, reports, automation, network communication, etc.

Perfectly suited to industrial applications, the FBOX-500 makes it possible to federate, secure and automate isolated or distributed sites, improving the responsiveness of the service provided to users, while reducing operating and operating costs...

In order to adapt to all needs, the FBOX-500 can be easily programmed using programming tools in accordance with IEC 61131. For more complex applications, it is possible, after a study of the need by our engineers, to carry out specific developments. (.NET, C / C ++, CODESYS ...)

The many communication possibilities (Wifi, ZigBee, LTE-3G-GRPS, Bluetooth, GPS, etc.) of the FBOX-500 offer the user the possibility of easily integrating this module into any M2M (Machine to Machine) architecture. Compatible with the various market standards (LoRaWAN ™, Sigfox, etc.), the FBOX-500 can be integrated quickly and easily into an IoT architecture.

APPLICATIONS

1. Remote monitoring
   - Sending Email / SMS on appearance and disappearance system faults and process alarms,
   - Periodic recovery of the whole remote site information,
   - Connection possible to supervision on the cloud.

2. Remote maintenance
   - Remote site assistance and maintenance,
   - Total remote control of the system to carry out commissioning, troubleshooting, an update etc...

3. Remote control
   - Data recording and management remote process,
   - System data recovery allowing to do operate dedicated applications (report edition, batch function, supervision tasks, etc ...)

SPECIFICATIONS

Main Features

Power supply:	9 to 30 Vdc – 0,5 A
Dimensions:	91 x 106 x 61 mm
Weight:	300 g
Matérials:	ABS resin
Mounting:	DIN rail mounting system included

Communication

Serial communication port: 2x RS232 or RS485 port

USB: 1x external USB 2.0 port (master)

MODEM Wireless link (option):
3G modem (-3G)
4G modem (-LTE)
Bluetooth 4.0 (-BT)
4G + GPS modem (-LTE / GPS)
WIFI standard 802.11 b / g / n (-WIFI)
LoRa + 3G modem (-3G-LoRa)
ZigBee modem (-Zigbee)

Communication bus:
1x ETHERNET 10/100 Mbps
1x 1-Wire
1x CAN (option)

System characteristics

Processor:	ARM Cortex A53 1.2GHz 64-bit quad-core
Memory:	1 GB LPDDR RAM - 8 Gb eMMC Flash memory
Clock:	Real time RTC
Operating system:	Linux 4.0+

Fuji Electric France S.A.S.

ARCHITECTURE

- Computer
- Generate report
- SMS alert
- GSM
- Ethernet

Inputs / Outputs

I/O logic :	4x ToR inputs (0- 30 Vdc) 4x ToR outputs (0- 30 Vdc, max load 500 mA) 4x configurable ToR inputs / outputs (0- 30 Vdc, maximum load 500 mA)
I/O analog :	4x 0-10 Vdc inputs, resolution on 18 bits
Note:	I/O is not managed as standard. For all requests, please consult our services.
Audio/Vidéo :	1x HDMI port
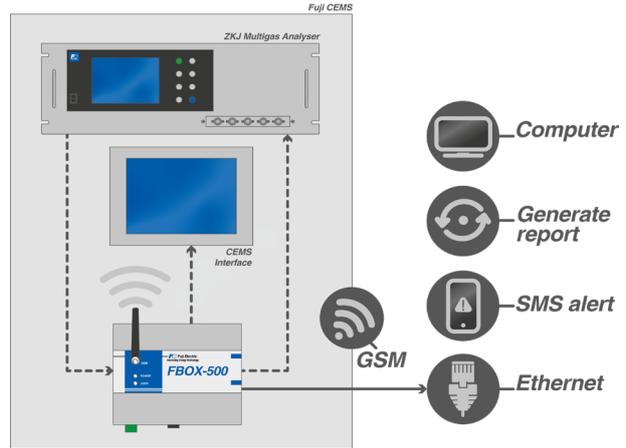
CODIFICATION

Positions: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

`F B O X - 5 0 0 - 1 -` [ ][ ][ ][ ][ ][ ][ ][ ]

10	11	12	13	14	15	16	17	DESCRIPTION
								Communication
X								Without
3								(-3G) Modem 3G
4								(-LTE) Modem 4G
B								(-BT) Bluetooth
G								(-LTE/GPS) 4G modem + GPS
W								(-WIFI) WIFI
L								(-3G-LoRa) LoRa + Modem 3G
Z								(-Zigbee) ZigBee
								Programming interface
	X							Without CODESYS Control Runtime
	C							With CODESYS Control Runtime
								Serial ports pre-configuration
		A						P1=RS232 / P2=RS232
		B						P1=RS232 / P2=RS485
		C						P1=RS485 / P2=RS232
		D						P1=RS485 / P2=RS485
								Specific services
			X					Any
			M					M2M module only
			C					Codesys PLC only
			T					Codesys PLC with M2M
			Z					Personalized (on estimate)
								GSM annual subscription
				X				Without
				E				France / Europe - 250MB / month
				Z				Other
								External antenna
					X			Without
					S			1m (Standard)
								External storage
						X		Without
						S		16Gb (Standard)
								eMMC internal memory
							8	8 Gb (Standard)

Fuji Electric

Fuji Electric France S.A.S.

46, rue Georges Besse- ZI du Brézet- 63039 Clermont-Ferrand Cedex 2- France
Tel. international +33 4 73 98 26 98- Fax. +33 4 73 98 26 99
Email: sales.dpt@fujielectric.fr- Web: www.fujielectric.fr