

MOX Unity Field Controller

MX602-5xxx

DATA SHEET

The MOX Unity Field Controller is a powerful controller designed for modern SCADA applications where control and information management are intensive.

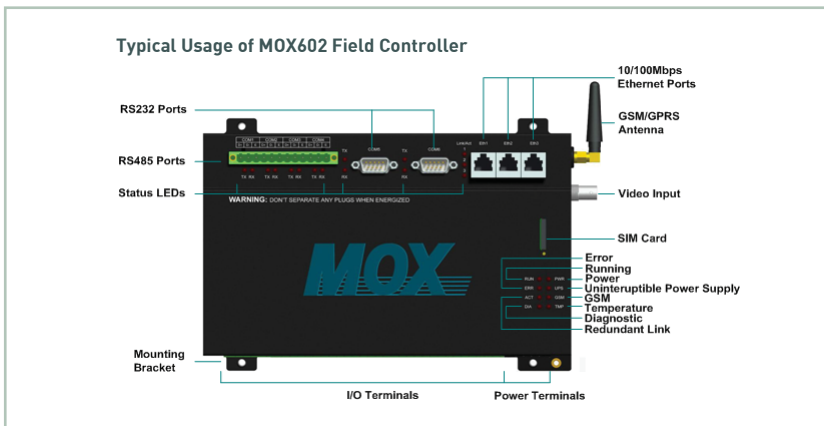
The MOX Unity delivers market-leading modularity allowing any mix of onboard I/O to be selected at the time of product ordering. The user may select up to four I/O modules in any mix, which are installed to provide the most efficient use of available I/O points. The various optional onboard modules may then provide useful application specific features.

The MOX Unity has an impressive selection of onboard communication modules available, including support for wireless technologies such as GSM/GPRS. Software configurable serial ports and fast Ethernet ports can be used to provide redundant and scalable communications.

For applications that require visual indication, an optional onboard video frame grabber can capture and transmit images to a central location for analysis. The smart design of the MOX Unity includes an optional onboard UPS battery charger ensuring seamless operation in the event of a power supply failure.

The MOX Unity can be configured to provide a unique redundant capability ensuring maximum reliability and uptime approaching 100%. In this configuration, MOX 603 I/O modules also provide redundant I/O capability.

The modular nature of the MOX Unity provides a future proof solution. If your requirements should change over time, as industry developments progress or as your plant expands, your MOX Unity system will be ready to accept the new technologies you may require.



Features

Modularity with your choice of onboard I/O

Open and Transportable IEC 61131-3 Control Software

True Redundancy supported at multiple levels

Integrated diagnostics

Standard Serial and TCP/IP Communications

Supports Modbus, DNP3.0 and IEC60870-5-101/4

Certified as non-sparking for use in explosive atmospheres to IECEx nA II T4



MOX Unity Field Controllers provide real time access to your operational and historic data and control of your system at both local and remote installations.

Specifications

Power Requirements	
Input Voltage	9 to 30VDC (24VDC nominal) (18 to 30VDC with UPS option)
Power Dissipation (without I/O modules, GPRS and UPS)	< 5W
Fuse Type	51NM-015H
Fuse Value	1.5A 250V
CPU Specifications	
Clock Speed	400MHz (max)
DDR RAM	64MBytes
Flash Memory	128MBytes
SD Memory Expansion	Up to 2GB*
Communication Specifications	
RS485 (Isolated)	0, 2 or 4
	Baud Rate: 1200bps to 115200bps
	Isolation Voltage: 2500Vrms
RS232	0 or 2
	Baud Rate: 1200bps to 115200bps
Ethernet	1 or 3 x 10/100Mbps ports
	Auto-Negotiation
	Auto-Crossover Detection
Extended Communication Specifications	
GPRS/GSM	EGSM 900 / GSM 1800
Approvals	
CE Approval	Application Field: Industry
	Noise Emission Requirements: EN 61000-6-4: 2007
	Noise Immunity Requirements: EN61000-6-2: 2005
IECEX Approval	Ex nA II T4

* factory fitted

UPS Specifications	
UPS Module	Optional onboard UPS
Battery Type	12V VRLA Battery
Constant Voltage Charge	Yes
Constant Voltage Charge Value	13.4V to 13.7V, Configurable
Constant Current Charge	Yes
Constant Current Charge Value	0.1A, 0.5A, 1.5A
Pulse Current Charge	Yes
Pulse Current Charge Value	100mA
Pulse Current Width	100ms
Pulse Current Duty Cycle	1/10
Max Charge Current	500mA
Battery Energy Measure	Yes
Battery Energy Report	Yes
Battery Energy Below Secure Level Alarm	Yes
Battery Low Level System Shut Down	Yes
Onboard I/O	
I/O Module Slots	4
Supported I/O Type	DI, DO, AI, AO
I/O Module Combination	Any
Other Characteristic	
Temperature Monitor	Yes
Temperature Alarm	Yes
Environmental Conditions	
Operating Temperature	-20 to 70°C (-20 to 55°C with GSM/GPRS option)
Storage Temperature	-40 to 85°C
Humidity	5 to 95% non-condensing (5 to 90% non-condensing with MX606-3201 GPRS)