

EasyIO FG-20+

20-POINT, IP CONTROLLER

A versatile plant controller, meter and data aggregator, the FG+ series has a 400 MHz Main Processor and a SD Card to maximize speed and storage. The FG+ series can be programmed live with CPT and interfaces directly to cloud services without an additional gateway or server.

Like the FS series, FG+ supports multiple, concurrent protocols BACnet, Modbus, TCOM, and web services. Utilize CPT kits, adapter widgets and graphics, import your own or develop applications specific to your needs. The FG+ is mobile ready with, HTML5. PHP and SQL allow unmatched flexibility for integration, interoperability and/or data management.

The FG-20+ has 6 UO, 12 UI, and 2 DO. Licenses and annual maintenance are included in the one-time cost of the controller.



FEATURE HIGHLIGHTS

- Memory card expansion for history and application backup and storage
- Supports BACnet MSTP Client/Server, BACnet IP Client/Server, Modbus RTU Master/Slave, Modbus TCP Master/Slave, TCOM, SOX
- EasyIO Peer to Peer Protocol, compatible with FS, FG+, FW and FT Series
- Built in web server with HTML5 compatible
- RESTful API and other web services
- Network Time Protocol (NTP) Client
- SMTP protocol (outgoing email) with SSL authentication
- SQL Lite up to 100,000 records
- Built in dashboard
- Supports simultaneous, multiple protocols without additional license fees
- Expansion capability with EasyIO-FD-20i, EasyIO-FC-20 or EasyIO-FT-04
- EasyIO Sedona Library for Logging, Control, Scheduling and Remote Management

SPECIFICATIONS

Power Supply	24V AC +/- 5% or 24V DC +20% / - 15%
Consumption	12VA
Current Rating	500mA at 24VAC/VDC
Storage Temp	-20 to 85 oC (-4 to 185 oF)
Operating Temp	0 to 65 0C (32 to 150 oF)
Operating Humidity	10% to 90% Relative Humidity noncondensing
Dimensions	198 x 104 x 44 (mm), 7.8 x 4.1 x 1.7 (inches)
Material	UL Approved
Weight	436g / 15.4 oz
Main Processor	ARM 400 MHz
Processor	ARM Cortex 72 MHz
Flash Memory	128MB
RAM	64MB
SD card Holder	Yes
Ethernet	1 x Ethernet Port 10Mb/100Mb 10Base-T/ 100Base-T interface, half or full duplex
RS 485 Ports	2 x RS485
Real Time Clock (RTC)	Real Time Clock with min 5 days backup by SuperCAP
Power Failure Protection	SuperCap Apps Safety Backup
Database and API	SQL database and REST API
Protocols Supported	BACnet MSTP Client/Server, BACnet IP Client/Server, Modbus RTU Master/Slave, Modbus TCP Master/Slave, TCOM, web services, HTML5, SOX
Email Service	SMTP protocol (outgoing email)
Time Sync Protocol	Network Time Sync Protocol
Modbus Baud Rate	Speed : (9.6K, 19.2k, 38.4K, 57.6K) , Data Bits : 8 , Parity : Odd, Even, None
BACnet Baud Rate	Speed : 9.6K, 19.2k, 38.4K
Ethernet	10Base-T/ 100Base-T interface, half or full duplex
Universal Inputs	12 x UI , 12-bit ADC with PGA Resistance Mode : 500 - 500K Ohms (+/- 10 Ohms) Voltage Mode : 0-10V (+/- 0.05V) Current mode: 0-20mA DC (+/- 0.01 mA) Impedance < 25 Ohms Pulse count mode (max): 20 Pulse per sec at 50% duty cycle (20Hz) Digital mode : Voltage Free Contact
Digital Output	2 x DO (with LED Indicator) Type: Relay Contacts, SPST NO, 48VA/2A at 24V
Universal Output	6 x UO, 12-bit DAC Voltage mode: output range 0-10V DC, Min Load Maximum 10ma current draw Impedance 1,000 Ohm. Current mode: 0-20mA, Max Load Impedance 800 Ohm. Digital mode: maximum sinking current 200mA (for Switching Relays)
SKU	EasyIO-FG-20+
Warranty	Yes, Ask your EasyIO Representative
Certifications	CE, BTL, UL, FCC, RoHS
Engineer Tool	CPT
Product and Engineering License	Included
Annual Maintenance	Included
Contact	www.easyio.com