

*i*³ Integrated PLC / HMI



- PLC with HMI function
- 128 x 64 LCD
- Addressable function keys
- Dual Serial Ports
- Remote I/O
- Ethernet connectivity
- Modem
- Real time clock
- IP65 (NEMA 4X)
- CE, cUL, UL



*i*³ provides the user with high performance HMI, fast and effective PLC and open Bus communications in one box! *i*³ features a unique case design that can be either panel or DIN rail mounted giving the user ultimate flexibility in positioning of the controller. *i*³ comes with a mix of both digital and analogue I/O, including T/C and PT100 inputs making it ideal for process control applications. *i*³ interfaces directly to IMO Smart I/O expanding capabilities and providing greater flexibility in system design. *i*³ features two, multi-function serial communications ports that can be used for programming, expansion I/O and modem connection making the *i*³ the most flexible controller in it's class.

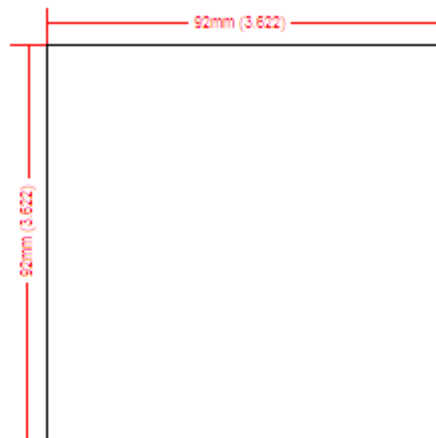
General Specification:

Operating Voltage:		9Vdc – 30Vdc		
Display:		STN LCD, 128x64, LED Backlit		
Inputs -	Digital	12 Vdc:	<3V	logic 0
			>9V	logic 1
	24Vdc:	<5V	logic 0	
		>17V	logic 1	
Analogue	10 bit, 0-10V, 0-20mA, 4-20mA, ± 2LSB			
	14 bit, 0-10V, 0-20mA, 4-20mA, PT100, TC, ± 2LSB			
Outputs -	Transistor	0.5A / channel - Short Circuit protected		
	Relay	Max. 5A (resistive), 230Vac, 12/24Vdc N/O		
	Analogue	12 bit – (4096), ± 0.1% linearity error		
Communication:		Port 1:	RS232	
		Port 2:	RS232 / RS485	
Operating Temperature:		0 – 60° C		
Storage Temperature:		-10 – 70° C		
Panel Size:		96 x 96 x 60mm (DIN96)		
Cut out:		92 x 92mm		
Panel Rating:		IP65 / NEMA 4X		

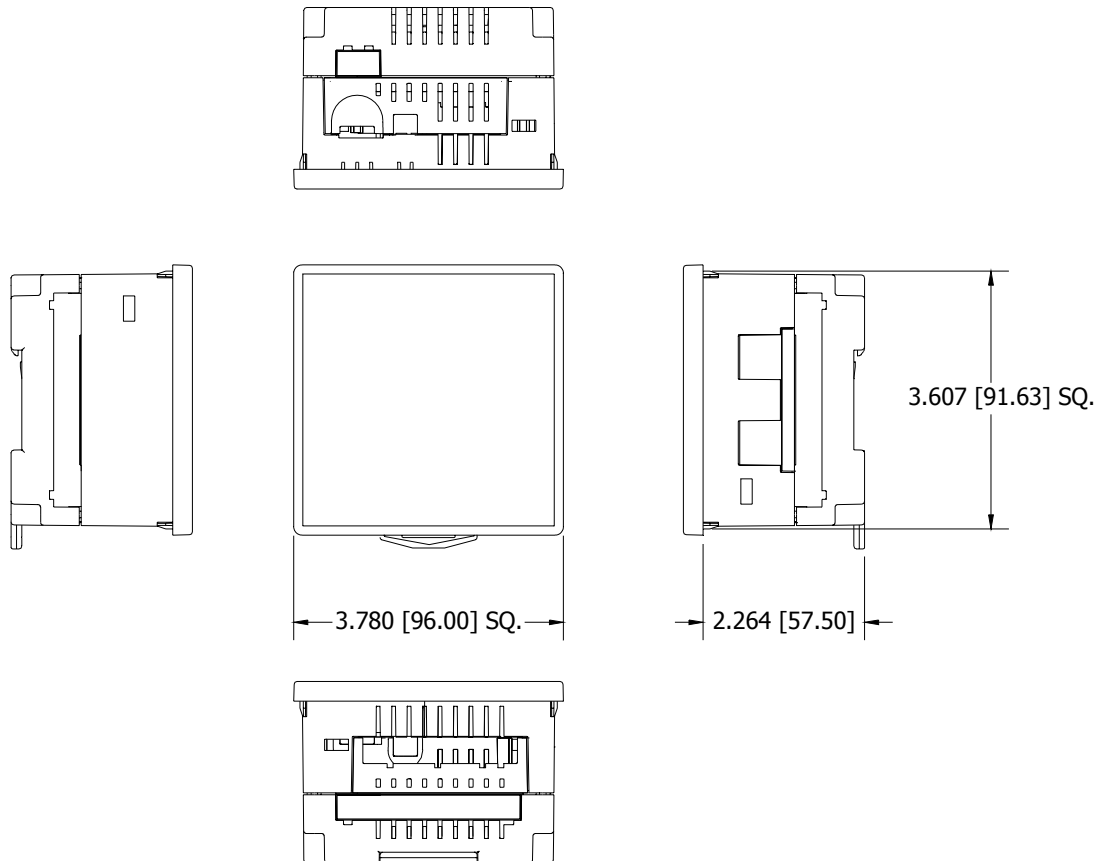
Model Specification

Table 1 – i ³ Series Specifications					
	i3A12X/10A01-SOO	i3A12X/10D03-SCH	i3A12X/10B04-SCH	i3A12X/20B05-SOH	i3A12X/13C14-SOH
Input Voltage	10 to 32 VDC				
Screen Type	128x64 LCD Backlit, monochrome STN.				
LCD Backlighting	Blue or Off (selectable).				
Keypad / LEDs	20 keys (10 fn keys, 4 soft screen keys).				
Keypad Type	Tactile Dome (1 million operations minimum).				
Application Memory - Graphics	1Mbyte				
Control Memory	256K Ladder Memory plus 32KB Register Space				
Control Scan Rate	0.1mS / K Ladder Logic (typical)*				
Digital Inputs	12	12	12	24	12
Digital Outputs	6 Relay	6 Relay	12 x 0.5A	16 x 0.5A	12 x 0.5A
Analogue Inputs	1 x 10 bit	4 x 10 bit	2 x bit	2 x 10 bit	2 x 14 bit
Analogue Outputs	-	-	-	-	2 x 12 bit
Built-in High Speed Counter / PWM	4 x 24V Input <10KHz				
Built-in PWM Outputs	-	-	2 Channels	2 Channels	2 Channels
CAN Port	-	1 isolated	1 isolated	-	-
I/O Expansion Interfaces	Serial RS485 252 Smart I/O points, maximum				
Portable Memory	Micro SD				
Battery	Replaceable 3V Lithium battery – 4.5 years (off) lifetime				
Ethernet Ports	Optional internal 10/100 Mbit board.				
Serial Ports	2 ports (RJ45)RS-232 & RS-232/485 RJ45				
Power Requirements (without I/O)	Steady State Current: 300mA @24VDC Inrush Current: 28A for 1ms @24VDC				
Temperature & Humidity	0 - 50°C (32 - 122°F), 5 to 95% Non-condensing.				
Compliance	CE, UL, ULC				
Environment	Designed for installation in a NEMA 12, NEMA 4/4X or IP65 environment.				
* Total ladder scan is impacted by several factors – logic, I/O, screen and communications update.					

Panel Cut-out



Dimensions:



Part Numbering:

	i3A12X/10A01-S00	i3A12X/10D03-SCH	i3A12X/10B04-SCH	i3A12X/20B05-S0H	i3A12X/13C14-S0H
CAN / miniCAN		•	•		•
Dual Serial Ports	•	•	•	•	•
12 Digital Inputs	•	•	•		•
24 Digital Inputs				•	
TC / PT100 Inputs					•
Relay outputs	•	•			
2 DC outputs (50mA)		•			
12 DC outputs (0.5A)			•		•
16 DC outputs (0.5A)				•	
4 analogue inputs		•			
1 analogue input	•				
2 analogue inputs			•	•	•
2 analogue outputs					•
High Speed Counter	•	•	•	•	•
Expansion	Serial	Serial / CAN	Serial/CAN	Serial	Serial
Flash Memory & Ethernet	i3A12X/10A01-S00E	i3A12X/10D03-SCHE	i3A12X/10B04-SCHE	i3A12X/20B05-S0HE	i3A12X/13C14-S0HE
Flash Memory & Modem (EU)	i3A12X/10A01-S00M	i3A12X/10D03-SCHM	i3A12X/10B04-SCHM	i3A12X/20B05-S0HM	i3A12X/13C14-S0HM
Flash Memory & Modem (US)	i3A12X/10A01-S00U	i3A12X/10D03-SCHU	i3A12X/10B04-SCHU	i3A12X/20B05-S0HU	i3A12X/13C14-S0HU



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