

# *i*<sup>3</sup> 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*<sup>3</sup> provides the user with high performance HMI, fast and effective PLC and open Bus communications in one box!

*i*<sup>3</sup> 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*<sup>3</sup> 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*<sup>3</sup> interfaces directly to IMO Smart I/O expanding capabilities and providing greater flexibility in system design.

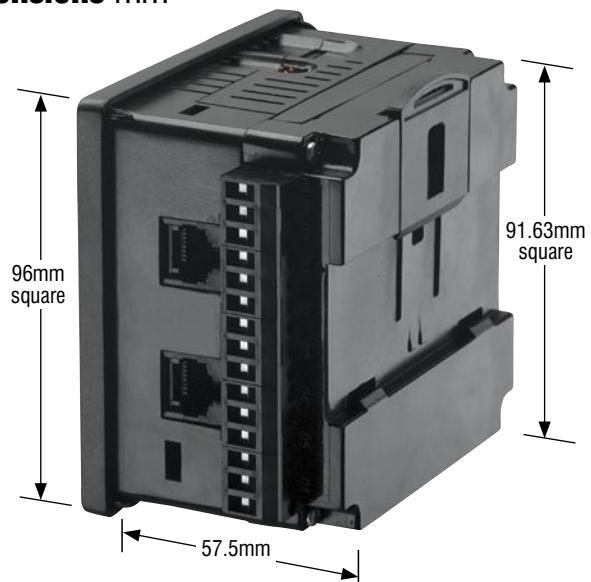
*i*<sup>3</sup> features two, multi-function serial communications ports that can be used for programming, expansion I/O and modem connection making the *i*<sup>3</sup> the most flexible controller in it's class.

## General Specifcaton

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
Inputs	Analogue	10 bit, 0-10V, 0-20mA, 4-20mA, ± 2LSB 14 bit, 0-10V, 0-20mA, 4-20mA, PT100, TC, ± 2LSB
Outputs	Transistor Relay Analogue	0.5A / channel - Short Circuit protected Max. 5A (resistive), 230Vac, 12/24Vdc N/O 12 bit – (4096), ± 0.1% linearity error
Communication:	Port 1 Port 2	RS232 / RS485 RS232 / RS485 / RS422
Operating Temperature	0 to 50° C	
Storage Temperature	-10 to 70° C	
Panel Size	96 x 96 x 60mm (DIN96)	
Cut out	92 x 92mm	
Panel Rating	IP65 / NEMA 4X	

**Panel Cutout** 92 x 92mm

## Dimensions mm



## Model Specifcator

Model	i3A12X/10A01-S00	i3A12X/10D03-SCH	i3A12X/10B04-SCH	i3A12X/20B05-S0H	i3A12X/13C14-S0H
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 10 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 (Option)				
Battery	Replaceable 3V Lithium battery – 4.5 years (off) lifetime				
Ethernet Port	Internal 10/100 Mbit board (Optional)				
Modem	Internal Quad Band GSM/GPRS Modem				
Serial Ports	2 ports (RJ45)RS-232 & RS-232/485 RJ45				
Power (Excl I/O)	Steady State Current: 300mA @24VDC Inrush Current: 28A@24VDC (for 1mS)				
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

## Features, Options and Accessories

Model	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				■	
Relay outputs (6)	■	■			
12 DC outputs (0.5A)			■		■
16 DC outputs (0.5A)				■	
4 analogue inputs		■			
1 analogue input					
2 analogue inputs	■		■	■	
2 TC / PT100 Inputs					■
2 analogue outputs					■
High Speed Counter	■	■	■	■	■
Real Time Clock	■	■	■	■	■
Expansion	Serial	Serial / CAN	Serial/CAN	Serial	Serial
Ethernet	i3A12X/10A01-S00E	i3A12X/10D03-SCHE	i3A12X/10B04-SCHE	i3A12X/20B05-S0HE	i3A12X/13C14-S0HE
GSM Modem	i3A12X/10A01-S00M	i3A12X/10D03-SCHM	i3A12X/10B04-SCHM	i3A12X/20B05-S0HM	i3A12X/13C14-S0HM
MicroSD® memory card	i3A12X/10A01-S00F	i3A12X/10D03-SCHF	i3A12X/10B04-SCHF	i3A12X/20B05-S0HF	i3A12X/13C14-S0HF

Software	i3Configurator
Programming Cable	i3PC45
MicroSD® 256MB	i3-MSD/256