

i³HX Intelligent Control Station

IMO

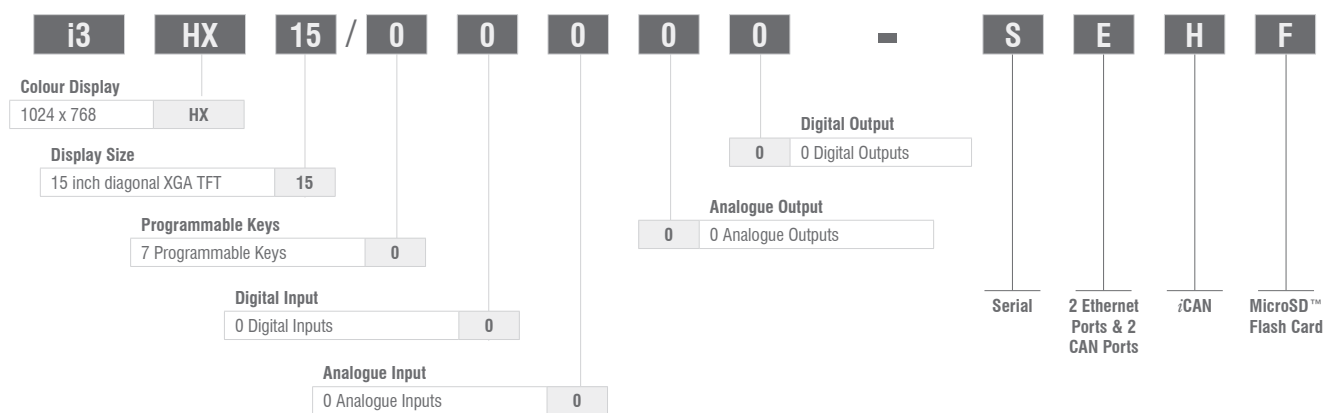
Technical Datasheet

Key Features

- 15" XGA TFT Colour Touchscreen
- 16 Million Colours (24-bit)
- MicroSD™ Data storage upto 128GB
- Real Time Clock
- 2 CAN Port, 3 RS-232 / RS-485
- 2 Integral Ethernet Ports
- USB Port for Programming
- USB Port for Flash Drives up to 2TB
- Addressable Virtual Function Keys
- 1MB RAM (Program), 4GB (Graphical)
- IP65 (NEMA4)
- 18 - 30 VDC Power Supply
- Online Programming
- FREE Configuration Software
- Remote I/O Communication



Options & Ordering Codes



Technical Specifications

General Specifications

Required Power (Steady State)	800mA @ 24VDC
Primary Voltage Range	18 - 30VDC
Inrush Current	25A for <1ms @ 24VDC
Relative Humidity	5 to 95% Non-Condensing
Clock Accuracy	+/-60 seconds per month at 20°C
Operating Temperature	-10°C to +60°C
Storage Temperature	-20°C to +70°C
Weight	3.46kg

Display Specifications

Display Type	15" XGA TFT (500 nit typical), 16 million colours
Resolution	1024 x 768 Pixels
Keys	Virtual Function Keys
Screen Memory	4GB
User-Programmable Screens	1023
Backlight	LED - 50,000 hour life
Screen Update Rate	User configurable within the scan time (perceived as instantaneous in many cases)
Video Out	Display Port - HDMI via active adaptor*

Control & Logic Specifications

Control Language Support	Advanced Ladder Logic, Full IEC 61131-3
Logic Program Size	1MB
I/O Support	Digital Inputs - 2048
	Digital Outputs - 2048
	Analogue Inputs - 512
	Analogue Outputs - 512
General Purpose Registers	50,000 (words) Retentive 16,384 (bits) Retentive 16,384 (bits) Non-retentive
Non-Retentive Memory	128kB

Connectivity

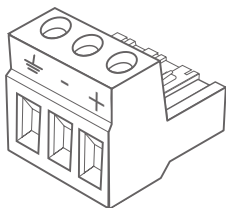
Serial Ports	3 RS-232 / 3 RS-485
USB mini-B	USB 2.0 (480MHz) Programming & Data Access
CAN	Remote I/O, Peer-to-Peer Comms, i3 Configurator
Remote I/O	IOS, Smart I/O, iSmart
Removable Memory	MicroSD™ (support for 32GB max) Application updates, Datalogging, more
Ethernet	10/100MB (Auto-MDX), Modbus TCP, HTTP, FTP, SMTP, i3 Configurator, Ethernet IP, iRMI
Audio	Mic In, Line Out*

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Power Wiring



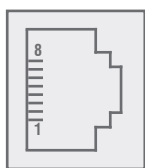
Primary Power Port Pins

Pin	Signal	Description
1	Ground	Frame Ground
2	DC -	Power Supply Common
3	DC +	Power Supply Voltage

DC Input / Frame

Solid/Stranded wire; 12-24AWG (2.5-0.2mm). Strip length - 0.28" (7mm)
Torque rating: 4.5-7.0 in/lbs (0.50-0.78Nm)
DC- is internally connected to I/O 0V
Class 2 power supply must be used to meet UL requirements

Serial Communication



Modular jack (8 posn RJ45)

MJ1: RS-232 w/full handshaking / RS-485 half-duplex
MJ2: RS-232 no handshaking / RS-485 full or half-duplex
MJ3: RS-232 no handshaking / RS-485 full or half-duplex
RS-485 termination and biasing via System Menu or System Register

CAN Communication



Locking Spring-Clamp
2-Terminators Per Conductor
Mounting screw torque rating: 4.5 Lb-in
(0.50Nm)

SHLD and V+ pins are not
internally connected to i³HX

MJ1 Pin			MJ2 Pin		MJ3 Pin	
Pin	Signal	Direction	Signal	Direction	Signal	Direction
8	TXD	OUT	TXD	OUT	TXD	OUT
7	RXD	IN	RXD	IN	RXD	IN
6	0V	Common	0V		0V	
5	+5VDC @ 60mA	OUT	+5VDC @ ± 60mA	OUT	+5VDC @ ± 60mA	OUT
4	RTS	OUT	TX-	OUT	TX-	OUT
3	CTS	IN	TX+	OUT	TX+	OUT
2	RX- / TX-	IN / OUT	RX-	IN	RX-	IN
1	RX+ / TX+	IN / OUT	RX+	IN	RX+	IN

Primary Power Port Pins			
Pin	Signal	Description	Direction
1	V-	CAN Ground - Black	-
2	CN L	CAN Data Low - Blue	IN / OUT
3	SHLD	Shield Ground - None	-
4	CN H	CAN Data High - White	IN / OUT
5	V+ (NC)	No Connect - Red	-

Dimensions & Panel Cutout

