

1280 ENTERPRISE SERIES

Programmable Color Touchscreen HMI Indicator/Controller

Specifications

Power AC:

Line voltages: 85-265 VAC
Frequency: 50 Hz or 60 Hz
Power: up to 60 watts

Power DC:

Line voltages: 9-36 VDC
Power: up to 60 watts

Excitation Voltage:

10 ± 0.5 VDC, with A/D card installed
16 x 350 Ω or 32 x 700 Ω load cells per A/D card

Analog Signal Input Range:

-78 mV to +78 mV

Analog Signal Sensitivity:

1.0 µV/graduation minimum @ 7.5 Hz-120 Hz
4.0 µV/graduation typical at 960 Hz

A/D Sample Rate:

7.5 to 960 Hz, software selectable

Resolution:

Internal resolution: 8 million counts
Weight display resolution: 9,999,999

System Linearity:

± 0.01% full scale

Digital I/O:

Eight I/O channels on CPU board; optional 24-channel I/O expansion boards available

Circuit Protection:

RFI, EMI, EFT, ESD protection

Onboard:

Microprocessor: Freescale i.MX6
Software selectable digital filter: Three stage, adaptive or damping
Embedded Linux® OS
8 GB eMMC (system use)
1 GB DDR3 RAM
485 MB onboard database (SQLite) storage
Up to 32 GB micro SD card (sold separately)

Communication Ports:

Port 1: Full duplex RS-232, RS-485 or RS-422
Port 2: Full duplex RS-232, RS-485 or RS-422
Port 3: USB 2.0 Device (type micro) USB 2.0 Host (type A)
Port 4: Bluetooth® Serial Port Profile 2.1+EDR and Low Energy (BLE) 4.0 Standards
Ethernet: Wired 10/100 Auto-MDX
Ethernet: Wireless 802.11 b/g/n 2.4GHz

Other Ports:

(2) USB 2.0 Host (type A) for mass storage/keyboard

Display and Keyboard:

Display: Seven-inch, 800 x 480 pixel, graphical color TFT display
500 NIT or 1000 NIT displays
Keyboard: 22-key membrane panel, tactile buttons, on-screen keyboard for text and numeric entry, USB port for external keyboard connection

Language Support*:

English, Spanish, French, Portuguese, Italian, German, Dutch, Danish, Swedish, Russian, Ukrainian, Hebrew, Chinese, Turkish, Thai, Arabic
**Language support for prompting and text entry.*

Operating Temperature:

Legal: 14°F to 104°F (-10°C to +40°C)
Industrial: -4°F to +131°F (-20°C to +55°C)

Weight:

Universal enclosure: 10.9 lb (4.9 kg)
Panel Mount enclosure: 6.6 lb (3.0 kg)
Wall Mount enclosure: 22.8 lb (10.3 kg)

Rating/Material:

NEMA Type 4X/IP66 wall enclosure
NEMA Type 4X/IP69K universal and panel mount enclosures

Material:

Stainless Steel

Warranty:

Two-year limited warranty

Approvals:

NTEP CC 15-00/Class III/IIIL 10,000d
Measurement Canada AM-5980C, Class III/II HD 10,000d
OIML (pending)
CE Marked
UL and C-UL Listed (pending)



APPROVALS



CC 15-001



Pending



Pending

Measurement
Canada
Approved
AM-5980C



Standard Features

- Seven-inch, 800 x 480 pixel, graphical color display that adjusts for ambient light conditions
- Highly customizable graphical user interface
- Three different enclosure types: universal with tilt stand, panel mount and wall mount
- Five-wire resistive color touchscreen that can be used with gloves
- On-screen keyboard available during entry mode or use an external keyboard
- Multi-language operation and text entry
- Keypad for scale operations, numeric entry and navigation
- More than 150 built-in functions for programming
- Customize applications and data tables with iRite™ software
- Built-in web server for remote access, systems integration and data monitoring
- Up to eight scales types:
 - analog load cell scales
 - serial scales
 - total scales
 - program scales
- Multi-range/interval weighing functions
- Eight digital I/O for control and pulse count
- 100 setpoints, 18 configurable setpoint types
- 22 soft keys with 10 user-defined
- Two RS-232 and RS-485 serial ports
- USB, Ethernet TCP/IP, WiFi and Bluetooth® ports

Options

- Six option cards that support:
 - A/D scale channels
 - digital input and outputs
 - analog outputs
 - serial ports
 - four channel dry-contact relay
 - various protocol interfaces

1280 ENTERPRISE SERIES

Programmable Color Touchscreen HMI Indicator/Controller

Generate a 1280 Enterprise Series Model Reference Code

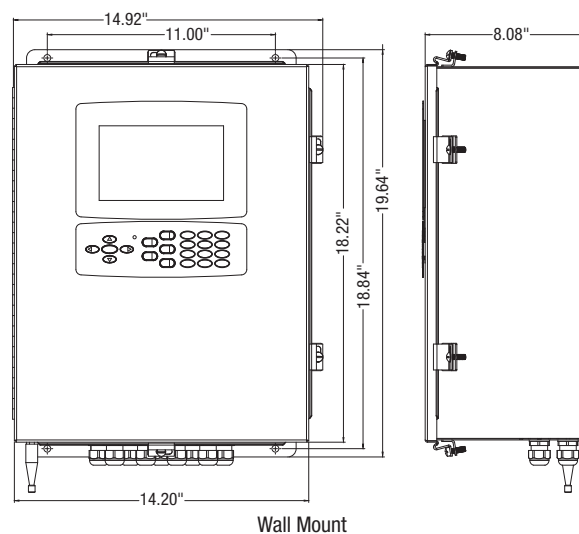
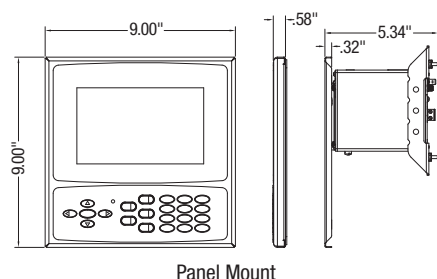
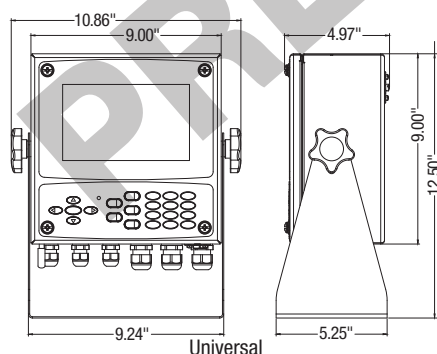
This reference number can be used at time of ordering.

Diagram showing the structure of the 1280 Enterprise Series Model Reference Code, consisting of 10 slots (dashed boxes) separated by dashes. The slots are defined by the following options:

ENCLOSURE TYPE	POWER TYPE	CORD TYPE	DISPLAY TYPE	OPTION CARDS <small>ALL SLOTS MUST BE FILLED</small>
1 Universal 2 Panel 3 Wall 4 Universal <i>special</i> 5 Panel <i>special</i> 6 Wall <i>special</i>	1 AC 2 DC	1 United States 2 None 3 Europe	1 500NIT 2 1000NIT	A Blank <i>If no option, controller will need 6 blanks</i> B Single A/D Scale C Dual A/D Scale D 24 Channel Digital I/O E Dual Serial Channel F Single Analog Out G Dual Analog Out H Dual Analog In with Thermal Couple I 4-dry Contact Relay J EtherNet/IP K DeviceNet L ProfiNet M Modbus TCP N Profibus DP

Part Number

PART #	REFERENCE #	DESCRIPTION	POWER	DISPLAY	OPTION INSTALLED	PRICE
Universal/Desktop Enclosure						
171427	111-1-BAAAAA	1280 Universal	115 VAC with US Plug	500 NIT	Single Scale Card	\$ 2,850.00
171441	113-1-BAAAAA	1280 Universal	85–265 VAC with Euro Plug	500 NIT	Single Scale Card	2,850.00
171662	111-1-CAAAAA	1280 Universal	115 VAC with US Plug	500 NIT	Dual Scale Card	3,000.00
172188	113-1-CAAAAA	1280 Universal	85–265 VAC with Euro Plug	500 NIT	Dual Scale Card	3,000.00
Panel mount Enclosure						
171663	212-1-BAAAAA	1280 Panel Mount	85–265 VAC	500 NIT	Single Scale Card	2,650.00
172186	212-1-CAAAAA	1280 Panel Mount	85–265 VAC	500 NIT	Dual Scale Card	2,800.00
Wall mount Enclosure						
172184	311-2-BAAAAA	1280 Wall Mount	115 VAC with US Plug	1000 NIT	Single Scale Card	3,350.00
172185	313-2-BAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	1000 NIT	Single Scale Card	3,350.00
172187	311-2-CAAAAA	1280 Wall Mount	115 VAC with US Plug	1000 NIT	Dual Scale Card	3,500.00
172187	313-2-CAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	1000 NIT	Dual Scale Card	3,500.00



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Single A/D Scale



Excitation Voltage:
10 VDC bi-polar, 4 or 6 wire sensing
16 x 350 ohms per channel
Analog Input Signal:
-10 to +40 mV

PART #	DESCRIPTION	PRICE
164085	1280 option, Single Scale A/D	\$350.00
163407	Board Assembly	325.00
163782	Parts Kit	25.00
153883	Connector, 6-position	9.00

Dual A/D Scale



Excitation Voltage:
10 VDC bi-polar, 4 or 6 wire sensing
8 x 350 ohms per channel
Analog Input Signal:
-10 to +40 mV

PART #	DESCRIPTION	PRICE
164683	1280 option, Dual Scale A/D	500.00
160760	Board Assembly	475.00
163784	Parts Kit	35.00
153883	Connector, 6-Position	9.00

Digital I/O



24 channels, configurable as inputs or outputs
Inputs: 5 VDC max, active low; Outputs: 20 mA max per channel, active low; 5 VDC source available: 500 mA max

PART #	DESCRIPTION	PRICE
164684	1280 option, Digital I/O	300.00
160761	Board Assembly	275.00
164691	Parts Kit	35.00
164918	Connector, 10-Position	17.00

Dual Serial Channel



2 channel, full duplex RS-232 with CTS/RTS, RS-485 or RS-422, 1200-115200 baud

PART #	DESCRIPTION	PRICE
164685	1280 option, Dual Serial Channel	350.00
162930	Board Assembly	325.00
164692	Parts Kit	25.00
153882	Connector, 5-Position	9.00

Single Analog Out



16 bit, voltage output 0-10 VDC, current output 0-20mA, 4-20mA

PART #	DESCRIPTION	PRICE
165366	1280 option, Single Analog Out	350.00
164704	Board Assembly	325.00
168816	Parts Kit	25.00
153878	Connector, 4-Position	11.00

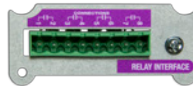
Dual Analog Out



16 bit, voltage output 0-10 VDC, current output 0-20mA, 4-20mA

PART #	WEIGHT	PRICE
164686	1280 option, Dual Analog Out	500.00
162931	Board Assembly	475.00
164693	Parts Kit	35.00
153878	Connector, 4-Position	11.00

Relay Card 4-Dry Contact



Relay 4 channel, dry contact, max current 3A @ 30 VDC, 3A @250VAC

PART #	DESCRIPTION	PRICE
164689	1280 option, Relay Card	\$350.00
164974	Board Assembly	325.00
164696	Parts Kit	25.00
152381	Connector, 8-Position	15.00

EtherNet/IP



ODVA compliant, allowing connection between scales and industrial network for data exchange with PLC or DCS systems.

PART #	DESCRIPTION	PRICE
165792	1280 option, EtherNet/IP	550.00
152357	EtherNet/IP Module	350.00
164756	Host board	195.00

DeviceNet



CIP compliant, allowing connection between scales and industrial network for data exchange with PLC or DCS systems with up to 64 node connections.

PART #	DESCRIPTION	PRICE
165793	1280 option, DeviceNet	550.00
152360	DeviceNet Module	350.00
164756	Host Board	195.00

Profinet



Integrates scales into a network, allowing data exchange with PLC or DCS systems. Fully compliant with internationally accepted Ethernet standards.

PART #	DESCRIPTION	PRICE
165794	1280 option, Profinet	550.00
152355	Profinet Module	350.00
164756	Host Board	195.00

Modbus TCP



Integrates scales into a network, allowing data exchange with PLC or DCS systems.

PART #	DESCRIPTION	PRICE
165796	1280 option, Modbus TCP	550.00
152359	Modbus TCP Module	350.00
164756	Host Board	195.00

Profibus DP



Profibus DP compliant, integrates scales into a network for data exchange with PLC or DCS systems with up to 125 node connections.

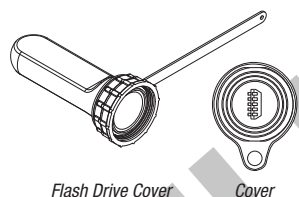
PART #	DESCRIPTION	PRICE
165795	1280 option, Profibus DP	550.00
152358	Profibus Module	350.00
164756	Host Board	195.00

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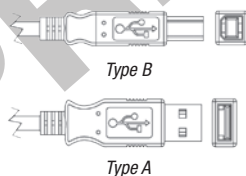
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Grayhill Relays and Racks

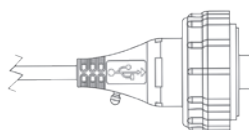
PART #	DESCRIPTION	PRICE
52332	2-channel input relay, 2.5-28VDC	\$45.00
52318	2-channel input relay, 120VAC	45.00
52319	2-channel input relay, 240VAC	45.00
52331	2-channel input relay, 10-32VDC	45.00
52316	2-channel output relay, 120-140VAC at 2 amp	45.00
52317	2-channel output relay, 240-280VAC at 7 amp	45.00
71376	2-channel output relay, 3-60VDC at 1 amp	65.00
71377	2-channel output relay, 0-200VDC/VAC at 1.5A/10W (dry contact)	85.00
84698	2-channel output relay, inductive load, 120-140VAC at 2A	65.00
84699	2-channel output relay, inductive load, 240-280VAC at 2A	65.00
52312	8-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 4 slots	135.00
52314	16-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 8 slots	185.00
52315	24-channel relay rack, panel mount and wall mount, requires 50-Pin flat or round ribbon cable - 12 slots	285.00
170008	Cable, 60-Pin flat ribbon w 50-Pin adapter	125.00
170009	Cable, 60-Pin round w 50-Pin adapter	150.00
170736	Cable, 60-Pin round w/ cord grip and 50-Pin adapter	150.00



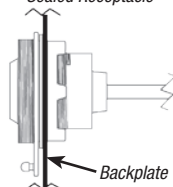
Unsealed Connectors



Sealed Connector



Sealed Receptacle



Options

PART #	DESCRIPTION	PRICE
Manuals and Software		
77925	Revolution scale software	35.00
166046	Manual, Operation	25.00
167659	Manual, Technical	35.00
167660	CD, 1280 Documents	25.00
Primary Component Parts		
163400	500 NIT display	300.00
163399	1000 NIT display	550.00
160757	CPU board assembly	995.00
160758	Back Plane board assembly	190.00
162693	AC Power Supply board	150.00
162694	DC power Supply board	150.00
161731	Overlay, Keypad	70.00
161730	Overlay, Touchscreen (not recommended field replacement)	125.00

Options/Accessories

PART #	DESCRIPTION	CONNECTOR TYPE				PRICE
USB Cables		Sealed		Unsealed		
Note: connector is a male plug, receptacle is a socket		A	B	A	B	
79074	Cable, unsealed connectors USB-A to USB-B, 6 ft			X	X	\$30.00
124700	IP68 Cable with sealed connectors, USB-A to USB-B, 3 m	X	X			70.00
126477	IP68 Cable with USB-A sealed connector, unsealed USB-A connector	X		X		70.00
124701	IP68 Cable with USB-A sealed connector, unsealed USB-B connector, 3 m	X			X	70.00
124702	IP68 Cable with USB-B sealed connector, unsealed USB-A connector, 3 m		X	X		70.00
USB Receptacles						
126476	Receptacle USB-A sealed to unsealed USB-A connector, 0.5 m	X		X		75.00
172735	Receptacle USB-A sealed to unsealed USB-A connector, 0.25 m	X		X		75.00
124694	Cover for sealed receptacles					5.00
124689	Cover for flash driver mounts on sealed receptacle					20.00
Ethernet Cables						
72697	Ethernet cable, unsealed RJ45 to RJ45, 7 ft			X		35.00
124706	Ethernet cable with sealed connectors, 3 m	X				70.00
124707	Ethernet cable sealed connector to unsealed connector, 3 m	X		X		70.00
Ethernet Receptacles		Sealed		Unsealed		
126353	Receptacle Ethernet RJ-45 receptacle sealed, 0.25 m	X				75.00
172734	Receptacle Ethernet RJ-45 receptacle sealed, 0.5 m	X				75.00