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 at 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 serial ports: 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) two USB Host(Type A): max 500mA
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: 11 lb (4.9 kg)
Panel Mount enclosure: 7 lb (3.1 kg)
Wall Mount enclosure: 23 lb (10.4 kg)

Rating/Material:
NEMA Type 4X/IP66 wall enclosure
NEMA Type 4X/IP69K universal and panel mount door enclosure seals

Material:
Stainless Steel

Warranty:
Two-year limited warranty

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

Wall Mount

Panel Mount

Universal

APPROVALS

NTEP CC 15-001	c(UL)us LISTED Pending	
OIML Pending	Measurement Canada Approved AM-5980C	CE Pending

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 supporting four scale 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 slots that support:
  - A/D scale channels
  - Serial ports
  - Digital input and outputs
  - Four channel dry-contact relay
  - Analog outputs
  - Various protocol interfaces

RICE LAKE

1280 ENTERPRISE SERIES
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Generate a 1280 Enterprise Series Model Reference Code
This reference number can be used at time of ordering.

ENCLOSURE TYPE
1 Universal
2 Panel
3 Wall
4 Universal *special*
5 Panel *special*
6 Wall *special*

POWER TYPE
1 AC
2 DC

### CORD TYPE
1 United States
2 None
3 Europe

DISPLAY TYPE
1 500NIT
2 1000NIT

OPTION CARDS *ALL SLOTS MUST BE FILLED*
A Blank
  If no option, controller will need 6 blanks
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 Enclosure with 500 NIT Display						
171427	111-1-BAAAAA	1280 Universal	115 VAC with US Plug	500 NIT	Single Scale Card	Consult
171441	113-1-BAAAAA	1280 Universal	85–265 VAC with Euro Plug	500 NIT	Single Scale Card	Consult
171662	111-1-CAAAAA	1280 Universal	115 VAC with US Plug	500 NIT	Dual Scale Card	Consult
172188	113-1-CAAAAA	1280 Universal	85–265 VAC with Euro Plug	500 NIT	Dual Scale Card	Consult
Panel mount Enclosure with 500 NIT Display						
171663	212-1-BAAAAA	1280 Panel Mount	85–265 VAC	500 NIT	Single Scale Card	Consult
172186	212-1-CAAAAA	1280 Panel Mount	85–265 VAC	500 NIT	Dual Scale Card	Consult
Wall mount Enclosure with 500 NIT Display						
173673	311-1-BAAAAA	1280 Wall Mount	115 VAC with US Plug	500 NIT	Single Scale Card	Consult
174143	313-1-BAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	500 NIT	Single Scale Card	Consult
174144	311-1-CAAAAA	1280 Wall Mount	115 VAC with US Plug	500 NIT	Dual Scale Card	Consult
174145	313-1-CAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	500 NIT	Dual Scale Card	Consult
Wall mount Enclosure with 1000 NIT Display						
172184	311-2-BAAAAA	1280 Wall Mount	115 VAC with US Plug	1000 NIT	Single Scale Card	Consult
172185	313-2-BAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	1000 NIT	Single Scale Card	Consult
173806	311-2-CAAAAA	1280 Wall Mount	115 VAC with US Plug	1000 NIT	Dual Scale Card	Consult
172187	313-2-CAAAAA	1280 Wall Mount	85–265 VAC with Euro Plug	1000 NIT	Dual Scale Card	Consult
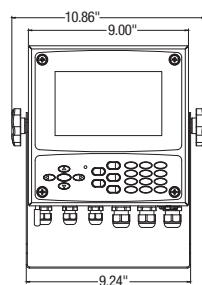
Universal
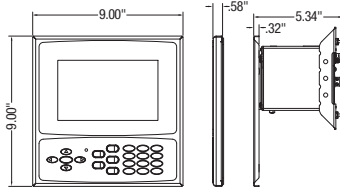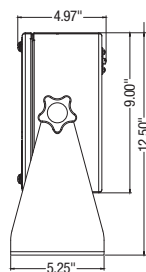
Panel Mount
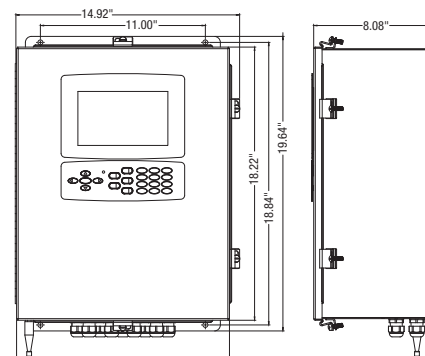
Wall Mount

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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	Consult
163407	Board Assembly	Consult
163782	Parts Kit	Consult
153883	Connector, 6-position	Consult

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	Consult
160760	Board Assembly	Consult
163784	Parts Kit	Consult
153883	Connector, 6-Position	Consult

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	Consult
160761	Board Assembly	Consult
164691	Parts Kit	Consult
164918	Connector, 10-Position	Consult

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	Consult
162930	Board Assembly	Consult
164692	Parts Kit	Consult
153882	Connector, 5-Position	Consult

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	Consult
164704	Board Assembly	Consult
168816	Parts Kit	Consult
153878	Connector, 4-Position	Consult

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	Consult
162931	Board Assembly	Consult
164693	Parts Kit	Consult
153878	Connector, 4-Position	Consult

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	Consult
164974	Board Assembly	Consult
164696	Parts Kit	Consult
152381	Connector, 8-Position	Consult

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	Consult
152357	EtherNet/IP Module	Consult
164756	Host board	Consult

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	Consult
152360	DeviceNet Module	Consult
164756	Host Board	Consult

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	Consult
152355	Profinet Module	Consult
164756	Host Board	Consult

Modbus TCP

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

PART #	DESCRIPTION	PRICE
165796	1280 option, Modbus TCP	Consult
152359	Modbus TCP Module	Consult
164756	Host Board	Consult

Profibus DP

Profibus DP compliant, integrates scales into a network for data exchange with PLC or DCS systems with up to 125 node connections.
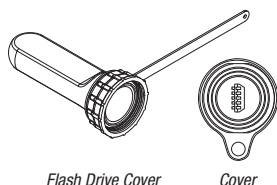
PART #	DESCRIPTION	PRICE
165795	1280 option, Profibus DP	Consult
152358	Profibus Module	Consult
164756	Host Board	Consult

1280 ENTERPRISE SERIES
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Grayhill Relays and Racks

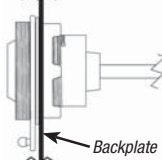| PART #	DESCRIPTION	PRICE
52332	2-channel input relay, 2.5-28 VDC	Consult
52318	2-channel input relay, 120 VAC	Consult
52319	2-channel input relay, 240 VAC	Consult
52331	2-channel input relay, 10-32 VDC	Consult
52316	2-channel output relay, 120-140 VAC at 2 amp	Consult
52317	2-channel output relay,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

Flash Drive Cover   *Cover*

Unsealed Connectors

Type B

Type A
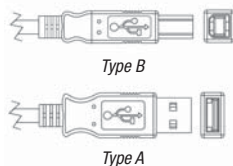
Sealed Connector   *Sealed Receptacle*
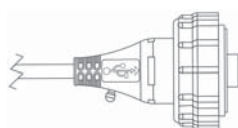
← *Backplate*

Options

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

Options/Accessories

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