



Approvals



Standard Features

- iQUBE² board has four A/D channels
- Supports networking up to four boards, for 16 A/D channels; connection can be up to four separate platforms with a system total, or four separate scale systems
- Diagnostic routines for weighing errors and system health
- Cell tests for overloaded, underloaded, zero reference, drift, noise and unbalanced conditions
- Onboard status LEDs for communication and visual bi-color indication of cell health
- Cell emulator compensates for load cell failure until a repair can be made

- Cal-Match[®] algorithm automatically trims and calibrates the scale in one pass of test weights (stopping over each mount)
- Standard communications
- Option card slot for fiber optic, Ethernet TCP/IP, wireless TCP/IP, USB or RS-232/RS-485
- Communicates to 920[®], 1280, VIRTU² using ASCII (EDP) serial commands

Applications

- Truck and railroad scales
- Tank and hopper scales
- Multi-channel scales

Part Number/Price

Part #	Description	Est. Weight	Price
With AC Power Supply			
108425*	iQUBE ² , four-channel, 8 × 10 in junction box	9 lb	Consult
108426	iQUBE ² , four-channel, 10 × 12 in junction box	11 lb	Consult
108427	iQUBE ² , eight-channel, 10 × 12 in junction box	11 lb	Consult
108428*	iQUBE ² , four-channel, stainless steel 8 × 10 in junction box	13 lb	Consult
Without Power Supply			
108429*	iQUBE ² , four-channel, 8 × 10 in junction box	8 lb	Consult
108430	iQUBE ² , four-channel, 10 × 12 in junction box	10 lb	Consult
108431	iQUBE ² , eight-channel, 10 × 12 in junction box	10 lb	Consult
108432*	iQUBE ² , four-channel, stainless steel 8 × 10 in junction box	12 lb	Consult
Conduit Adaptors			
92734	Conduit adaptor 3/8 in NTP to 3/4 in NPT		Consult
92735	Conduit adaptor 1/2 in NTP to 3/4 in NPT		Consult

* Enclosure size 8 × 10 in required for truck scale junction box pocket

Note: Do not mix junction box models or use other brands of junction boxes with Rice Lake junction boxes. There is a risk of system instability.

Specifications

Voltage Input:

115/230 VAC power supply DC/DC converter for 9 to 36V
6 to 12 V DC to CPU

Analog Signal Input Range:

-78 to +78 mV

Analog Signal Sensitivity:

0.3 uV/grad at 30 Hz
0.5 uV/grad at 100 Hz
1.2 uV/grad at 500 Hz

A/D Sampling Rate:

2.5 to 500 Hz (selectable)

Digital I/O:

Four per card, for push-button operation, setpoint control or cell status

Communication Ports:

RS-232/RS-422

Load Cell Inputs:

Four channels per board
up to four networked boards

Load Cell Excitation:

5 V DC, 57 mA maximum per channel

Temperature Range:

Certified:
14 °F to 104 °F (-10 °C to 40 °C)
Operating:
-13 °F to 140 °F (-25 °C to 60 °C)
Storage:
-13 °F to 158 °F (-25 °C to 70 °C)

Rating/Material:

Polycarbonate (NEMA Type 4X) enclosure with overlapping solid cover, stainless steel screws
Fiberglass reinforced polyester (NEMA Type 4X) enclosure with overlapping solid cover, stainless steel screws
Stainless steel (NEMA Type 4X) enclosure with hinged cover

Warranty:

Two-year limited

Approvals:

NTEP 03-032A1
Measurement Canada AM-5561
cULus E151461
CE Marked

Options/Accessories

Part #	Description	Price
108433	Four-channel iQUBE ² board with cables and connectors	Consult
97475	DC/DC power supply, 9-36 VDC (requires factory installation)	Consult
108434	Remote power supply 115/230 VAC and transient board with enclosure	Consult
109396	Transient board	Consult
110949	Transient board with mount	Consult
161954	Hotspot in polycarbonate enclosure	Consult
Communication Card		
108579	RS-232/RS-485 port	Consult
77142	Ethernet TCP/IP	Consult
108671	Wireless LAN 802.11 B/G	Consult
93245	USB port	Consult
77143	Fiber-optic board	Consult
77788	Fiber-optic board (installed in 920i)	Consult
Duplex Fiber (Max Run 350 ft)		
78026	Fiber-optic cable, 100 ft	Consult
78027	Fiber-optic cable, 200 ft	Consult
78910	Fiber-optic cable, custom length	Consult/ft
Home Run Cable		
116587	EL166 16 gauge, six conductor, shielded	Consult/ft
Software		
108436	VIRTUi ² activation part number	Consult
112262	Firmware update flash cable	Consult
920i[®] Indicators for use with iQUBE2, requires version 4 software		
77790	920i Universal, 115 VAC, without A/D	Consult
77791	920i Universal, 230 VAC, without A/D	Consult
93243	920i Deep Universal, 115 VAC, without A/D	Consult
93244	920i Deep Universal, 230 VAC, without A/D	Consult
77792	920i Panel Mount, 115 VAC, without A/D	Consult
77793	920i Panel Mount, 230 VAC, without A/D	Consult
77794	920i Wall Mount, 115 VAC, without A/D	Consult
77795	920i Wall Mount, 230 VAC, without A/D	Consult
1280 Indicators for use with iQUBE2		
189623	1280 7 inch touch-only, AC power supply, no power cord, standard display, without A/D	Consult
188526	1280 7 inch touch-only, AC power supply, no power cord, high visibility display, without A/D	Consult
188395	1280 12 inch touch-only, AC power supply, no power cord, high visibility display, without A/D	Consult
181073	1280 Panel Mount, DC power supply, no power cord, standard display, without A/D	Consult
178473	1280 Panel Mount, AC power supply, no power cord, high visibility display, without A/D	Consult
205677	1280 Wall Mount, AC power supply, U.S. power cord, standard display, without A/D	Consult
171667	1280 Wall Mount, AC power supply, U.S. power cord, high visibility display, without A/D	Consult
174750	1280 Panel Mount, AC power supply, no power cord, standard display, without A/D	Consult
174207	1280 Universal, AC power supply, Europe power cord, standard display, without A/D	Consult
171582	1280 Universal, AC power supply, U.S. power cord, standard display, without A/D	Consult
188713	1280 Universal, DC power supply, no power cord, standard display, without A/D	Consult
171540	1280 Universal, DC power supply, no power cord, high visibility display, without A/D	Consult
172419	1280 Universal, AC power supply, U.S. power cord, high visibility display, without A/D	Consult



Sample Configurations*

*Not an actual system—illustrates connectivity

Dimensions

Stainless Steel 8 × 10 in			
A	11.50 in (292 mm)	E	6.00 in (152 mm)
B	10.30 in (262 mm)	F	4.30 in (109 mm)
C	10.90 in (277 mm)	G	4.20 in (107 mm)
D	8.30 in (211 mm)		
POLY 8 × 10 in			
A	10.10 in (257 mm)	E	4.00 in (102 mm)
B	9.50 in (241 mm)	F	6.00 in (152 mm)
C	8.50 to 9.30 in (216 to 236 mm)	G	5.70 in (145 mm)
D	7.40 in (188 mm)		
POLY 10 × 12 in			
A	12.10 in (307 mm)	E	6.00 in (152 mm)
B	11.50 in (292.1 mm)	F	7.00 in (178 mm)
C	10.50 to 11.30 in (267 to 287 mm)	G	6.70 in (170 mm)
D	9.30 in (236 mm)		

