

# iQUBE 2®

## Digital Diagnostic Junction Box

### Standard Features:

- iQUBE board has four A/D channels
- NEMA 4X polyester or stainless steel enclosure
- 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 scales systems
- Diagnostic routines for weighing errors and system health
- Cell tests for overloaded, underloaded, zero reference, drift, noise, and unbalanced conditions
- Onboard status LED's for communications 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 communication RS-232/RS-422 Option card slot for Fiber Optic, Ethernet TCP/IP or Wireless TPC/IP
- Four digital I/O per card, for push button operation, set point control, or cell status

### Applications:

- Mission critical weighing processes, including:
- Truck and railroad track scales
- Tank and hopper scales
- Multi-channel scales

### Specifications:

#### Enclosure:

NEMA 4X FRP or stainless steel

#### Voltage Input:

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

#### Load Cell Inputs:

4 channels per board up to 4 networked boards

#### A/D Sampling Rate:

2.5-500 Hz (selectable)

#### Temperature Range:

14°F to 104°F (-10°C to 40°C)

#### Analog signal sensitivity:

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

#### Load Cell Excitation:

5V DC, 57 mA maximum per channel

#### Analog range:

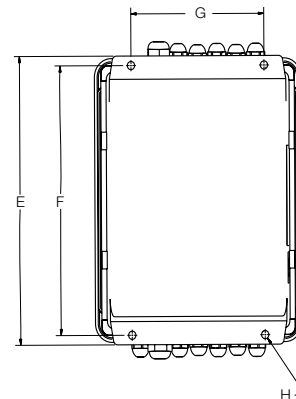
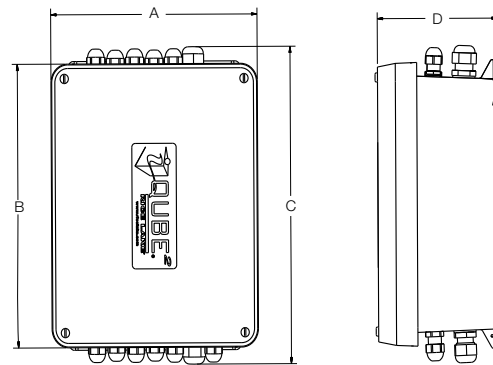
-4.5 mV/V to +4.5 mV/V

#### Approvals:

NTEP 03-032A1  
Measurement Canada - AM-5561, Rev. 1  
UL E151461  
CE

#### Warranty:

Two-year limited warranty



DIMENSIONS			
<b>Stainless Steel 8 in x 10 in</b>			
A	8.91 in (226.3 mm)	E	11.50 in (292.1 mm)
B	10.13 in (257.3 mm)	F	10.75 in (268.5 mm)
C	12.57 in (319.3 mm)	G	6.00 in (152.4 mm)
D	4.29 in (109 mm)	H	0.312 in (7.9 mm)
<b>FRP Large 10 in x 12 in</b>			
A	11.30 in (287 mm)	E	13.53 in (343.7 mm)
B	13.33 in (338.6 mm)	F	12.76 in (324.1 mm)
C	14.00 in (355.6 mm)	G	8.00 in (203.2 mm)
D	5.57 in (141.5 mm)	H	0.312 in (7.9 mm)
<b>FRP Small 8 in x 10 in</b>			
A	9.31 in (236.5 mm)	E	11.51 in (287.2 mm)
B	11.31 in (287.2 mm)	F	10.75 in (273.1 mm)
C	12.85 in (326.4 mm)	G	6.00 in (152.4 mm)
D	5.42 in (137.7 mm)	H	0.312 in (7.9 mm)

## Part Number/Price

PART #	DESCRIPTION	EST. SHIP WEIGHT	PRICE
<b>With AC Power Supply</b>			
108425*	iQUBE2, 4-channel, FRP 8 in x 10 in junction box	9 lb	Consult
108426	iQUBE2, 4-channel, FRP 10 in x 12 in junction box	11 lb	Consult
108427	iQUBE2, 8-channel, FRP 10 in x 12 in junction box	11 lb	Consult
108428*	iQUBE2, 4-channel, stainless steel 8 in x 10 in junction box	13 lb	Consult
<b>Without Power Supply</b>			
108429*	iQUBE2, 4-channel, FRP 8 in x 10 in junction box	8 lb	Consult
108430	iQUBE2, 4-channel, FRP 10 in x 12 in junction box	10 lb	Consult
108431	iQUBE2, 8-channel, FRP 10 in x 12 in junction box	10 lb	Consult
108432*	iQUBE2, 4-channel, stainless steel 8 in x 10 in junction box	12 lb	Consult
<b>Conduit Adapters</b>			
92734	Conduit adapter 3/8 NPT to 3/4 NPT		Consult
92735	Conduit adapter 1/2 NPT to 3/4 NPT		Consult

Enclosure size 8 x 10 in required for truck scale j-box pocket

## Options/Accessories

PART #	DESCRIPTION	PRICE
108433	Four channel iQUBE2 board with cables and connectors	Consult
97475	DC/DC power supply, 9-36V DC (requires factory installation)	Consult
108434	Remote power supply 115/230V AC and transient board with enclosure	Consult
109396	Transient board	Consult
110949	Transient board with mount	Consult
112979	Digi XTend radio, 900 MHz, high data throughput	Consult
161936	Hotspot WiFi 802.11 a, b, g	Consult
161954	Hotspot in FRP enclosure	Consult
<b>Communication Card</b>		
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
<b>Duplex Fiber (Max Run 350 ft)</b>		
78026	Fiber Optic cable, 100 ft	Consult
78027	Fiber Optic cable, 200 ft	Consult
78910	Fiber Optic cable, custom length	Consult
<b>Home Run Cable</b>		
116587	EL 166 16 gauge, 6 conductor, shielded	Consult
<b>Software</b>		
77925	Revolution® Configuration Software	Consult
108435	Virtui2® Virtual Indicator Demo CD	Consult
108436	Virtui2 Activation part number	Consult
112262	Firmware update flash cable	Consult
<b>920i Indicators for use with iQUBE2, requires version 4 software</b>		
77790	920i Universal, 115V AC, without A/D	Consult
77791	920i Universal, 230V AC, without A/D	Consult
93243	920i Deep Universal, 115V AC, without A/D	Consult
93244	920i Deep Universal, 230V AC, without A/D	Consult
77792	920i Panel Mount, 115V AC, without A/D	Consult
77793	920i Panel Mount, 230V AC, without A/D	Consult
77794	920i Wall Mount, 115V AC, without A/D	Consult
77795	920i Wall Mount, 230V AC, without A/D	Consult

## Sample Configurations\*

\*Not an actual system—illustrates connectivity

