

# iQUBE<sup>2</sup> Digital Diagnostic Junction Box



## APPLICATIONS:

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

## STANDARD FEATURES:

- Enclosure includes four channel boards with or without power supply
- NEMA 4X polyester or stainless steel enclosure
- Up to 16 load cells can be connected
- 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<sup>®</sup> 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

## 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

## SAMPLE CONFIGURATIONS\*

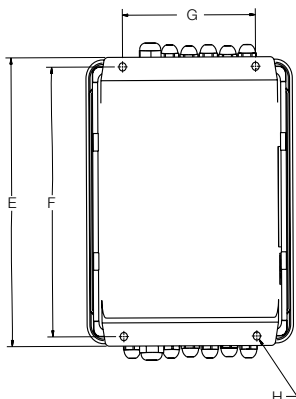
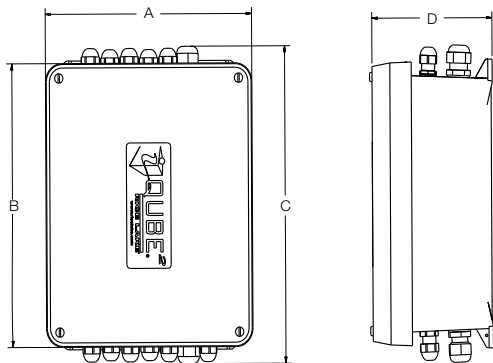


\*Not an actual system—illustrates connectivity

# iQUBE<sup>2</sup> (continued)

## PART NUMBER/PRICE

PART #	DESCRIPTION	EST. SHIP WEIGHT	PRICE
<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>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>Conduit Adapters</b>			
92734	Conduit adapter 3/8 NTP to 3/4 NPT		Consult
92735	Conduit adapter 1/2 NTP to 3/4 NPT		Consult



## 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	Wireless radio, 90 MHz, high data throughput	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'	Consult
78027	Fiber Optic cable, 200'	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 <sup>®</sup> Configuration Software	Consult
108435	Virtui2 <sup>®</sup> 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

## DIMENSIONS

<b>Stainless Steel 8 in x 10 in</b>			
A	8.91	E	11.50
B	10.13	F	10.75
C	12.57	G	6.00
D	4.29	H	.312
<b>FRP Large 10 in x 12 in</b>			
A	11.30	E	13.53
B	13.33	F	12.76
C	14.00	G	8.00
D	5.57	H	.312
<b>FRP Small 8 in x 10 in</b>			
A	9.31	E	11.51
B	11.31	F	10.75
C	12.85	G	6.00
D	5.42	H	.312