

iQUBE 2®

Digital Diagnostic Junction Box

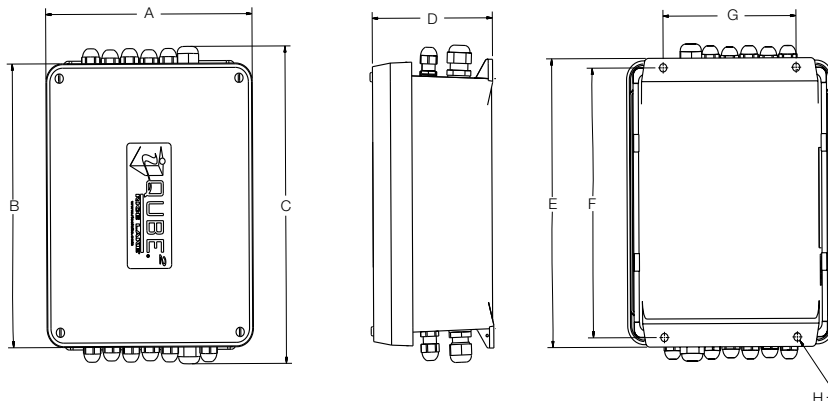


Standard Features

- iQUBE² board has four A/D channels
- Stainless steel or Fiberglass Reinforced Polyester (FRP), NEMA Type 4X polyester 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 LEDs 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, wireless TCP/IP, USB or RS-232/485
- Four digital I/O per card, for push-button operation, setpoint controller cell status

Dimensions

| Stainless Steel 8 in x 10 in | | | |
|------------------------------|---------------------|---|---------------------|
| 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) |
| FRP Large 10 in x 12 in | | | |
| 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) |
| FRP Small 8 in x 10 in | | | |
| 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) |



Specifications

Enclosure:

Stainless steel or Fiberglass Reinforced Polyester (FRP), NEMA Type 4X enclosure

Voltage Input:

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

Load Cell Inputs:

Four channels per board up to four 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:

5 VDC, 57 mA maximum per channel

Analog Range:

-4.5 mV/V to 4.5 mV/V

Approvals:

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

Warranty:

Two-year limited warranty

Applications

- Truck and railroad scales
- Tank and hopper scales
- Multi-channel scales
- Interfaces to 920i[®], 1280, Virtui2[®] and ASCII serial commands

Part Number/Price

| Part # | Description | Est. Weight | Price |
|-----------------------------|---|-------------|---------|
| With AC Power Supply | | | |
| 108425* | iQUBE2, four-channel, FRP 8 in x 10 in junction box | 9 lb | Consult |
| 108426 | iQUBE2, four-channel, FRP 10 in x 12 in junction box | 11 lb | Consult |
| 108427 | iQUBE2, eight-channel, FRP 10 in x 12 in junction box | 11 lb | Consult |
| 108428* | iQUBE2, four-channel, stainless steel 8 in x 10 in junction box | 13 lb | Consult |
| Without Power Supply | | | |
| 108429* | iQUBE2, four-channel, FRP 8 in x 10 in junction box | 8 lb | Consult |
| 108430 | iQUBE2, four-channel, FRP 10 in x 12 in junction box | 10 lb | Consult |
| 108431 | iQUBE2, eight-channel, FRP 10 in x 12 in junction box | 10 lb | Consult |
| 108432* | iQUBE2, four-channel, stainless steel 8 in x 10 in junction box | 12 lb | Consult |
| Conduit Adaptors | | | |
| 92734 | Conduit adaptor 3/8 in NPT to 3/4 in NPT | | Consult |
| 92735 | Conduit adaptor 1/2 in NPT to 3/4 in NPT | | Consult |

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

Options/Accessories

| Part # | Description | Price |
|---|--|------------|
| 108433 | Four-channel iQUBE2 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 |
| 161936 | Hotspot Wi-Fi 802.11 a, b, g | Consult |
| 161954 | Hotspot in FRP 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 | | |
| 77925 | Revolution [®] configuration software | Consult |
| 108435 | Virtui2 [®] virtual indicator demo CD | N/C |
| 108436 | Virtui2 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 |



Sample Configurations*

*Not an actual system—illustrates connectivity

Options/Accessories

| Part # | Description | Price |
|--|---|---------|
| 1280 Indicators for use with iQUBE2 | | |
| 189623 | 1280 7 in touch-only, AC power supply, no power cord, standard display, without A/D | Consult |
| 188526 | 1280 7 in touch-only, AC power supply, no power cord, high visibility display, without A/D | Consult |
| 188395 | 1280 12 in 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 |
| 176214 | 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 |