

# 420 Plus

Digital Weight Indicator



## Standard Features

- LED display, 0.8 in (20.3 mm), six-digit, seven-segment
- Full numeric keypad
- NEMA Type 4X/IP66 stainless steel washdown enclosure
- Power for eight 350 ohms load cells or 16, 700 ohms load cells
- Configurable analog to digital measurement rate
- Primary/secondary units configuration: lb, kg, ounces, short tons, metric tons, grams or none
- Two independent communication ports:  
(2) full duplex, (1) unidirectional active 20 mA current loop
- Standardized EDP command sets
- Programmable ticket formats up to three 300-character printouts
- Full front-panel digital calibration and configuration
- Universal mounting stand
- Three-stage digital filtering
- Consecutive transaction numbering
- Two digital inputs, two digital outputs
- Time and date
- Count mode
- Two setpoints, free running
- Keyed tare
- Accumulator
- Configurable with Revolution® software

## Approvals



Measurement  
Canada  
Approved



## Specifications

### Power, AC:

Line voltages: 100-240VAC  
Frequency: 50-60 Hz  
Power consumption: 1.5A at 115VAC (8W)  
0.75A at 230VAC (8W)

### Power, DC:

Line voltages: 9-36VDC DC input  
Power consumption: 1.5A Max

### Excitation Voltage:

+5VDC 8 x 350Ω or 16 x 700Ω load cells

### Analog Signal Input Range:

-0.5 mV/V - 4.5 mV/V

### Analog Signal Sensitivity:

0.3 μV/graduation minimum,  
1.5 μV/grad recommended

### A/D Sample Rate:

7.5 to 60 Hz software selectable

### Resolution:

Internal: 8 million internal graduations  
Display: 100,000 displayed graduations

### System Linearity / PI Rating:

Within 0.01% of full scale

### Digital I/O:

Two inputs with eight functions  
Two outputs, 250 mA max sink

### Circuit Protection:

RFI, EMI, ESD protection

### Communication Ports:

EDP port: Full duplex RS-232  
Printer port: Full duplex RS-232 or simplex active  
20 mA current loop  
Both ports: 38400, 19200, 9600, 4800, 2400, 1200,  
600, 300bps; 7 or 8 data bits; even, odd, or no parity

### Display:

0.8 in (20 mm), six-digit super red light emitting diode  
(LED) display, seven-segment, digits

### Status Annunciators:

Designators for: Center of zero, stand still, gross, net,  
lb, kg, count, tare

### Keys/Buttons:

21-key flat membrane panel

### Temperature Range

Certified: 14°F to 104°F (-10°C to 40°C)  
Operating: 14°F to 122°F (-10°C to 50°C)

### Weight:

6.1 lb (2.8 kg)

### Rating/Material:

Enclosure: NEMA Type 4X/IP66, heavy gauge  
stainless steel

### Warranty:

Two-year limited warranty

### Approvals:

NTEP CC 04-076, Class III/IIIL 10,000d  
Measurement Canada AM-5554, Class III/IIHD  
10,000d  
EU Test Certificate TC004, 10,000d  
UL/cUL Listed  
CE marked

## Part Number/Price

Part #	Description	Est. Weight	Price
85124†	420, 115 VAC	10 lb	Consult
85125††	420, 230 VAC	10 lb	Consult
85126††	420, 230 VAC CE marked/OIML approved	10 lb	Consult
85656	420, 9-36 VDC nominal	10 lb	Consult
88652†	420 Plus, 115 VAC w/quick connect (Required cable 53640)	10 lb	Consult
88653††	420 Plus, 230 VAC w/quick connect (Required cable 53640)	10 lb	Consult

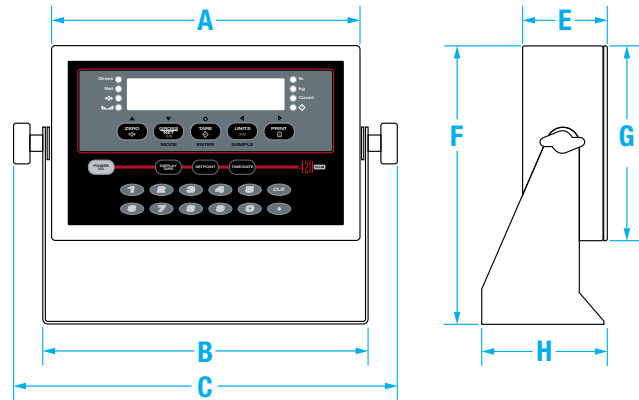
† NEMA 5-15 plug    †† CEE 7/7 plug (Euro)

## Options/Accessories

Part #	Description	Price
85659	Analog output: selectable 0-10V, 4-20 mA	Consult
52948**	Panel mount kit	Consult
77925*	Revolution® scale software	Consult
85127	Additional operating manual	Consult
92777	Filter, PreVent™ vent kit	Consult
91895	Quick Connect, female connector and cable, 17 in	Consult
53640	Quick Connect, male connector and cable, 20 ft	Consult
Primary Component Parts		
88835	Board assembly	Consult
84397	Overlay membrane panel	Consult
76556	Power supply, auto switching	Consult
132750	DC/DC converter, 9-36VDC	Consult
85791	Fuse, 2.5A, 5 mm x 20 mm	Consult

\* Revolution can be downloaded for free at [www.ricelake.com](http://www.ricelake.com)

\*\* Panel mount kit is not NEMA rated, consult factory for modifications.



Dimensions					
A	9.50 in (241 mm)	E	3.12 in (79 mm)	H	3.25 in (83 mm)
B	10.02 in (255 mm)	F	8.57 in (217 mm)		
C	11.80 in (300 mm)	G	6.00 in (152 mm)		