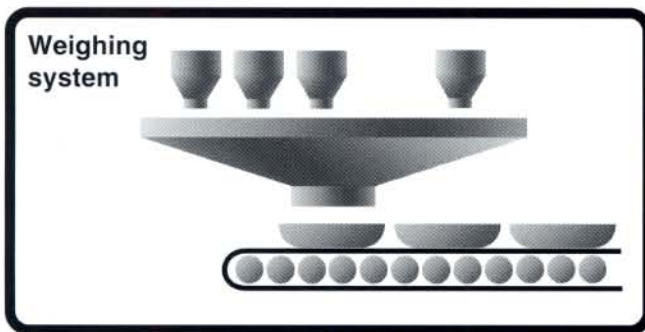


APPLICATION EXAMPLE



SPECIFICATIONS

ANALOG

■ **Loadcell excitation:**

DC10V \pm 5%

■ **Loadcell current:**

120mA (4-350 ohm loadcells)

■ **Loadcell cabling:**

4-wire standard, 6-wire with remote sensing

■ **Zero adjustment range:**

0 to approx. 2mV/V (digital adjustment)

■ **Span adjustment range:**

0.3 to 2.0mV/V (digital adjustment)

■ **Analog input signal sensitivity:**

0.075 μ V/count

■ **Stability:**

Zero drift : within 0.1 μ V/ $^{\circ}$ C RTI (referred to input)

Gain drift : 5ppm/ $^{\circ}$ C

■ **Non-linearity:**

within 0.01%/FS

■ **Analog filter:**

Bessel type low-pass filter (-12dB/oct.)

2, 4, 6 or 8 Hz selectable

■ **Conversion rate:**

100 times/second (10mS)

FEATURES

- High speed A/D conversion and powerful digital processing capabilities of 100 times/sec., for rapid response to input signal.
- Preset up to 100 coded groups of set point values with sequential running total for each group.
- Precision head amplifier for outstanding accuracy (0.1 μ V/ $^{\circ}$ C).
- Bessel type low-pass analog filter (2,4,6,8Hz) and selectable digital filter (2,4,8,16,32,64,128 times per sec.), prevents the influence of vibration.
- Feeding, discharge gate control sequence weighing function initiated by start signal.
- Full digital front panel calibration.
- Secondary calibration with a simple resistor connection.
- All setting values backed-up to non-volatile RAM and C-MOS RAM by lithium battery prevents data loss from a power failure.

■ **Resolution:**

16 bits

■ **Display resolution:**

1/10,000 (Legal for Trade), 1/40,000 expanded

DISPLAY

■ **Display :**

Original Vacuum Fluorescent Display

■ **Numeric display:**

Eight (8) digits, 12mm (0.47 inch)

■ **Weight value display:**

5 digits

■ **Unit:**

Selectable g, kg, t, lb, N, none

■ **Decimal point:**

Selectable 0, 0.0, 0.00, 0.000

■ **Display frequency:**

Selectable 3, 6, 13, 25 times/sec. (internal 100 times/sec.)

■ **Scale capacity:**

5 digits (up to 99999)

■ **Min. scale division:**

1 to 100 selectable

■ Over-scale display:

A-D converter input overflow 'Load'
Net weight over (5 digits) 'OFL1'
Scale capacity plus 9 counts 'OFL2'
Gross weight over (5 digits) 'OFL3'

■ Center zero:

'CZ' turns on when the displayed value is at the center of zero ($0 \pm 1/4$ scale).

■ Status display:

Indicated by fixed character display SET/LOCK/HOLD/
Z.ALM (zero alarm)/STAB. (stable)/TARE/NET/GROSS/
RUN/UPER LV (upper limit value)/LOWR LV (lower limit
value)/NEAR Z. (near zero)/SP1 (set point 1)/SP2 (set point
2)/SP3 (set point 3)/OVER/GO/UNDER/COMPL
(complete)/D.CHG (discharge)

■ Set value display:

Vacuum Fluorescent Display (VFD)
4mm high (0.16 inch)
CODE/FINAL/OVER/UNDER/SP1/SP2/CPS AFC

■ Accumulation display:

VFD 4mm high (0.16 inch)
Accumulating times 4 digits
Accumulation value 9 digits

■ No. display:

VFD 4mm high (0.16 inch)
Alarm No. 2 digits
Error number during sequence control
Sequence No. 3 digits
The progress number during sequence control

CONFIGURATION

■ Setting method:

Keyboard operation (membrane keyboard with a key click
buzzer)

■ Memory:

Initial set values—NOV RAM (Non-volatile RAM)
Other set values—C-MOS RAM backup by a lithium
battery (effective more than 7 years, depending on operating
conditions)

■ Protection of set values (LOCK):

Initial set values and calibration can be protected from
unauthorized access.

■ Setting items:

Calibration—zero calibration/span calibration/balance weight value/
capacity/min. scale division/over net/over gross/display update rate/
decimal point/1/4 scale display ON/OFF/unit

Comparative setting 1—SP1/SP2/CPS/final/under/over
(These items preset according to 100 individual codes.)

Comparative setting 2—near zero/lower limit/upper limit/
preset tare weight/comparison inhibit time/judging times/
complete time/discharging time

Function setting—digital filter/motion detection/weighing
function 1/weighing function 2/weighing function 3/function
key inhibited/RS-232C/485, MINI-S3 I/F, SI/FII, SYSBUS,
ODVA/ID number

■ External output signal:

The output signal circuit is an open-collector output of a transistor.
near zero/SP1/SP2/SP3/under/go/over/complete/discharge/
lower limit/upper limit/stable/weight error/error/final error/run

■ External input signal:

Signals are inputted by shorting or opening Input and COM terminals.
gross and net switching/digital zero/tare on/tare off/hold or
judgement/feed and discharge switching/accumulation command/
accumulation clear/start/stop/discharging command

■ Setpoint code input:

BCD 2 digits (00-99), 100 codes

INTERFACE

■ SI/F: 2-Wire Serial Interface

Connects Controller to printer and remote displays (up to 3 units).

■ BCO: BCD Parallel Data Output Interface (option)

Transmits weight data to a PLC or other BCD devices.

■ 232: RS-232C Communication Interface (option)

Weight data, status and set values can be written or read
by a host computer.

■ BCI: BCD Parallel Data Input Interface (option)

Receives commands from an BCD device.

■ 485: RS-485 Communication Interface (option)

Addressable serial communication for connecting several
units. Transmission distance is longer than RS-232C.

■ DAC: D/A Converter Interface (option)

Weight data converted to an analog signal (voltage or current).

■ SI2: SI/FII Interface (option)

2-wire high speed bidirection serial interface (Up to 20
units may be connected).

■ MEL: Mitsubishi MELSECNET/MINI-S3

[PLC Interface] (option)

■ MOI: Mitsubishi MELSECNET with Optical I/F

[PLC Interface] (option)

■ SYB: Omron CompoBus/D serial SYSBUS

[PLC Interface] (option)

■ TLK: Fuji T-LINK [PLC Interface] (option)

■ ODN: ODVA "Open DeviceNet" [PLC Interface] (option)

■ CCL: Control & Communication Link [PLC Interface] (option)

GENERAL SPECIFICATIONS

■ Voltage input:

AC100V, 120V, 200V or 220V +10% -15% 50/60Hz

■ Power consumption:

Approx. 20VA

■ Operating temperature:

-10°C to +40°C (+14F to +104F)

■ Storage temperature:

-40°C to +80°C (-40F to +176F)

■ Humidity:

< 85% RH (non-condensation)

■ Dimensions:

130W × 207H × 150D mm (5.12 × 8.15 × 5.91 inch)

■ Weight:

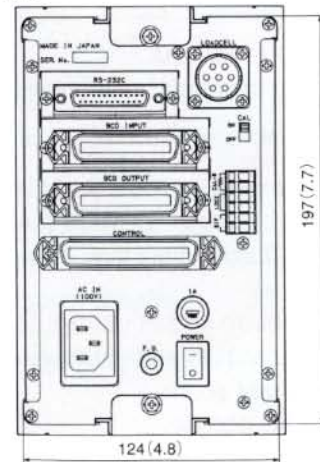
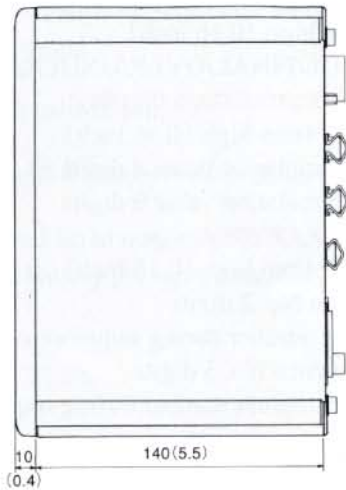
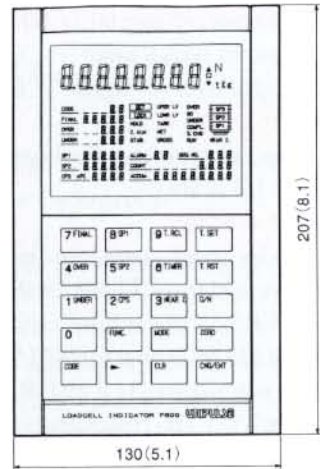
Approx. 3kg (6.61 lb)

ASSORTMENT OF OPTIONS

	BCD OUT (BCO)	BCD IN (BCI)	D/A (DAC)	RS-232C (232)	RS-485 (485)	SI/FII (SI2)	MELSEC (MEL)	Optical I/F (MOI)	SYSBUS (SYS)	T-LINK (TLK)	DeviceNet (ODN)	CC-Link (CCL)
BCO	●											
BCI		●										
DAC			●									
232				●								
485					●							
SI2						●						
MEL							●					
SYS								●				
TLK									●			
ODN										●		
CCL												●
BCO+BCI	●	●										
BCO+DAC	●		●									
BCO+232	●			●								
BCO+485	●				●							
BCO+SI2	●					●						
BCO+MEL	●						●					
BCO+SYS	●							●				
BCI+DAC		●	●									
BCI+232		●		●								
BCI+485		●			●							
BCI+SI2		●				●						
BCI+MEL		●					●					
BCI+SYS		●						●				
DAC+232			●	●								
DAC+485			●		●							
DAC+SI2			●			●						
DAC+MEL			●				●					
DAC+SYS			●					●				
BCO+TLK	●								●			
BCI+TLK		●							●			
DAC+TLK			●						●			
BCO+ODN	●									●		
BCI+ODN		●								●		
DAC+ODN			●							●		
BCO+CCL	●											●
BCI+CCL		●										●
DAC+CCL			●									●
MEL+MOI							●	●				
BCO+BCI+232	●	●		●								
BCO+BCI+485	●	●			●							
BCO+BCI+SI2	●	●				●						
BCO+DAC+232	●		●	●								
BCO+DAC+485	●		●		●							
BCO+DAC+SI2	●		●			●						
BCI+DAC+232		●	●	●								
BCI+DAC+485		●	●		●							
BCI+DAC+SI2		●	●			●						
BCO+MEL+MOI	●						●	●				
BCI+MEL+MOI		●					●	●				
DAC+MEL+MOI			●				●	●				

● Technical specifications are subject to change due to technological progress.

DIMENSIONS



UNIT : mm (inch)

UNIPULSE Corporation

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