

Commandor

The Scale Master



Product LineUp

MODEL		<100t	>100t	ANALOG	DIGITAL	MEMORY	CONTROL
HP-05		✓		✓		✓	
HP-05K		✓		✓	✓	✓	
HP-06		✓		✓	✓		
HP-08		✓		✓	✓		
HP-08M		✓		✓		✓	
HP-09			✓	✓	✓		
HP-10			✓	✓	✓	✓	
HP-11		✓		✓			✓
HP-12		✓		✓			
TS-02		✓		✓		✓	
CT-04		✓		✓			✓
MiniPC						✓	

Commandor

Memory with Data Management Indicator



HP-05
Powerfull Model

DESCRIPTION	SPECIFICATION
Display	LCD Graphic 128 x 64 Dots with backlight
Signal Input	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)
Display increment	50,000 Levels (Approx.)
Loadcell	Up to 10 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM
Decimal point	0 – 3 Digits
Increment Step	1, 2, 5, 10, 20
Keyboard	20 x KeyPads
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Character	English / TIS Thai (Auto 3 Levels)
Printer Port	Parallel / Serial RS-232C
Memory	Upto 4 x 64 Kbytes
Transaction	1200 Records (Upto 3600 Records)
In-Process	120 Records (Upto 360 Records)
Code Table	250 Company, 250 Product
Operating Temperature	0 C – 40 C , < 85% RH
Power Supply	12-16 V , 1 A
Casing	Stainless Steel
Dimension (W x H x D)	34.0 x 18.5 x 16.5 cm.

Specifications subject to change without notice

Commandor

Memory with Data Management Indicator

HP-05K
Best Seller Model



DESCRIPTION	HP-05K	HP-05KD	HP-05KDR
Display	LCD 128 x 64 Dots with backlight	LCD 128 x 64 Dots with backlight	LCD 128 x 64 Dots with backlight
Signal Input	1 - 3 mV/V	Serial RS-485	Serial RS-485
Excitation Voltage	5 +/- 0.5 VDC	9 +/- 0.5 VDC	9 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	100,000 Levels (Min.)	Upto Loadcell
Display increment	50,000 Levels (Approx.)	50,000 Levels (Approx.)	99,999 Levels
Loadcell	Up to 10 x 350 Ohm	Semi Digital Junction Box	Up to 8 Address
Calibration Method	Software, Storage in EEPROM	Software, Storage in EEPROM	Software, Storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	Keyboard PS/2	Keyboard PS/2	Keyboard PS/2
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Character	English/Thai (Auto 3 Levels)	English/Thai (Auto 3 Levels)	English/Thai (Auto 3 Levels)
Printer Port	Parallel / Serial RS-232C	Parallel / Serial RS-232C	Parallel / Serial RS-232C
Memory	Upto 4 x 64 Kbytes	Upto 4 x 64 KBytes	Upto 4 x 64 KBytes
Transaction	1200 Rec. (Upto 3600 Rec.)	1200 Rec. (Upto 3600 Rec.)	1200 Rec. (Upto 3600 Rec.)
In-Process	120 Rec. (Upto 360 Rec.)	120 Rec. (Upto 360 Rec.)	120 Rec. (Upto 360 Rec.)
Code Table	250 Company, 250 Product	250 Company, 250 Product	250 Company, 250 Product
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A	12-16 V , 1 A	12-16 V , 1 A
Casing	Stainless Steel	Stainless Steel	Stainless Steel
Dimension (W x H x D)	34.0 x 18.5 x 16.5 cm.	34.0 x 18.5 x 16.5 cm.	34.0 x 18.5 x 16.5 cm.

Specifications subject to change without notice

Commandor

High Resolution Weight Indicator



HP-06
Popular Model



DESCRIPTION	HP-06A ANALOG	HP-06D DIGITAL
Display	LCD 128 x 64 Dots with backlight	LCD 128 x 64 Dots with backlight
Power Supply	100-230 VAC, 50 or 60 Hz, 500mA	100-230 VAC, 50 or 60 Hz, 500mA
Signal Input	1 - 3 mV/V	Serial RS-485
Excitation Voltage	5 +/- 0.5 VDC	9 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	Upto Loadcell
Display increment	50,000 Levels (Approx.)	99,999 Levels
Loadcell	Up to 10 x 350 Ohm	Up to 8 Address
Calibration Method	Software, Storage in EEPROM	Software, Storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	6 Keys	6 Keys
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Operating Temperature	0 C - 40 C, < 85% RH	0 C - 40 C, < 85% RH
Power Supply	12-16 V, 1 A	12-16 V, 1 A
Casing	Stainless Steel	Stainless Steel
Dimension (W x H x D)	28.0 x 18.5 x 16.5 cm.	28.0 x 18.5 x 16.5 cm.

Specifications subject to change without notice

Commandor

High Resolution Weight Indicator

HP-08
Luxury Model



DESCRIPTION	HP-08A ANALOG	HP-08D DIGITAL
Display	LCD 240x128 Dots with backlight	LCD 240x128 Dots with backlight
Power Supply	100-230 VAC, 50 or 60 Hz, 500mA	100-230 VAC, 50 or 60 Hz, 500mA
Signal Input	1 - 3 mV/V	Serial RS-485
Excitation Voltage	5 +/- 0.5 VDC	9 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	Upto Loadcell
Display increment	50,000 Levels (Approx.)	99,999 Levels
Loadcell	Up to 10 x 350 Ohm	Up to 8 Address
Calibration Method	Software, long-term storage in EEPROM	Software, long-term storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	6 Keys	6 Keys
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A	12-16 V , 1 A
Casing	Stainless Steel	Stainless Steel
Dimension (W x H x D)	27.5 x 18.5 x 15.0 cm.	27.5 x 18.5 x 15.0 cm.

Specifications subject to change without notice

Commandor

Memory with Data Management Indicator

HP-08M Hi-End Model



DESCRIPTION	SPECIFICATION
Display	LCD Graphic 240 x 120 Dots with backlight
Signal Input	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)
Display increment	50,000 Levels (Approx.)
Loadcell	Up to 10 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM
Decimal point	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20
Keyboard	Keyboard PS/2
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Character	English / TIS Thai (Auto 3 Levels)
Printer Port	Parallel / Serial RS-232C
Memory	Upto 4 x 64 Kbytes
Transaction	1200 Records (Upto 3600 Records)
In-Process	120 Records (Upto 360 Records)
Code Table	250 Company, 250 Product
Operating Temperature	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A
Casing	Stainless Steel
Dimension (W x H x D)	27.5 x 18.5 x 15.0 cm.

Specifications subject to change without notice

Commandor

High Resolution Weight Indicator



HP-09
Smart Model



DESCRIPTION	HP-09A ANALOG	HP-09D DIGITAL
Display	6 Digit x 7 Segment Red/Green LED	6 Digit x 7 Segment Red/Green LED
Power Supply	100-230 VAC, 50 or 60 Hz, 500mA	100-230 VAC, 50 or 60 Hz, 500mA
Signal Input	1 - 3 mV/V	Serial RS-485
Excitation Voltage	5 +/- 0.5 VDC	9 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	Upto Digital Loadcell
Display increment	50,000 Levels (Approx.)	99,999 Levels
Loadcell	Up to 10 x 350 Ohm	Up to 8 Address
Calibration Method	Software, Storage in EEPROM	Software, Storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	20 KeyPads	20 KeyPads
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A	12-16 V , 1 A
Casing	Stainless Steel	Stainless Steel
Dimension (W x H x D)	26.0 x 18.5 x 16.5 cm.	26.0 x 18.5 x 16.5 cm.

Specifications subject to change without notice

Commandor

Memory with Data Management Indicator

HP-10 Grand Model



DESCRIPTION	HP-10A	HP-10D
Display	6 x7 Segment Red/Green LED and LCD 128 x 64 Dots with backlight	6 x7 Segment Red/Green LED and LCD 128 x 64 Dots with backlight
Signal Input	1 - 3 mV/V	Serial RS-485
Excitation Voltage	5 +/- 0.5 VDC	9 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	Upto Digital Loadcell
Display increment	50,000 Levels (Approx.)	99,999 Levels
Loadcell	Up to 10 x 350 Ohm	Up to 8 Address
Calibration Method	Software, Storage in EEPROM	Software, Storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	Keyboard PS/2	Keyboard PS/2
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Character	English / TIS Thai (Auto 3 Levels)	English / TIS Thai (Auto 3 Levels)
Printer Port	Parallel / Serial RS-232C	Parallel / Serial RS-232C
Memory	Upto 4 x 64 Kbytes	Upto 4 x 64 Kbytes
Transaction	1200 Records (Upto 3600 Records)	1200 Records (Upto 3600 Records)
In-Process	120 Records (Upto 360 Records)	120 Records (Upto 360 Records)
Code Table	250 Company, 250 Product	250 Company, 250 Product
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A	12-16 V , 1 A
Casing	Stainless Steel	Stainless Steel
Dimension (W x H x D)	28.0 x 19.0 x 18.5 cm.	28.0 x 19.0 x 18.5 cm.

Specifications subject to change without notice

Commandor

Multi-System Panel Controller Indicator

HP-11 Control Model



DESCRIPTION	SPECIFICATION
Display	LCD Graphic 128 x 64 Dots with backlight
Power Supply	100-230 VAC, 50 or 60 Hz, 500mA
Signal Input	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)
Display increment	50,000 Levels (Approx.)
Loadcell	Up to 8 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM
Decimal point	0 – 3 Digits
Increment Step	1, 2, 5, 10, 20
Keyboard	4 Keys (Func, Clear, Tare, Zero)
Communication	RS-232C or RS-485 Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
I/O Control	4 x Isolate Input , 6 x DC Driver Output
Function Control	Batching, Mixing, Setpoint
Operating Temperature	0 C – 40 C , < 85% RH
Power Supply	12-16 V , 1 A
Casing	Aluminum
Dimension (W x H x D)	21.5 x 11.5 x 19.0 cm.

Specifications subject to change without notice

Commandor

High Resolution Weight Indicator

HP-12
Economic Model



DESCRIPTION	SPECIFICATION
Display	6 Digits x 7 Segment Red LED
Signal Input	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)
Display increment	10,000 Levels (Approx.)
Loadcell	Up to 8 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM
Decimal point	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20
Keyboard	6 Keys (Func, Mode, Clear, Tare, Zero, Print)
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200, 2400, 4800, 9600, 19200
Operating Temperature	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1 A
Casing	Stainless + Aluminum
Dimension (W x H x D)	25.0 x 16.0 x 9.0 cm.

Specifications subject to change without notice

Commandor

Memory with Data Management Indicator



TS-02P

Touch Screen + Printer



TS-02

Touch Screen Scale

DESCRIPTION	TS-02	TS-02P
CPU	ARM Cortex 64 bits 1.4 GHz	ARM Cortex 64 bits 1.4 GHz
Display	7 inch TFT Color LCD	7 inch TFT Color LCD
Signal Input	1 - 3 mV/V	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	100,000 Levels (Min.)
Display increment	50,000 Levels (Approx.)	50,000 Levels (Approx.)
Loadcell	Up to 8 x 350 Ohm	Up to 8 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM	Software, long-term storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	Capacitive Touch Screen	Capacitive Touch Screen
Communication	2 Channels RS-232C Baud rate 1200,2400,4800,9600,19200	2 Channels RS-232C Baud rate 1200,2400,4800,9600,19200
Application Software	Scale1, Scale2, Scale3, Truck Scale	Scale1, Scale2, Scale3, Truck Scale
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Printer	N/A	Thermal, 32 Char./Line, KU42 Code
Power Supply	12-16 V , 2A	12-16 V , 2A
Casing	Stainless Steel + ABS Plastic	Stainless Steel + ABS Plastic
Dimension (W x H x D)	30.0 x 20.0 x 11.0 cm.	30.0 x 20.0 x 11.0 cm.

Specifications subject to change without notice

Commandor

Multi-System Panel Controller Indicator

CT-04

TS-04



DESCRIPTION	CT-04	TS-04
Display	LCD Graphic 240 x 128 Dots with backlight	7 inch TFT Color Graphic LED
Signal Input	1 - 3 mV/V	1 - 3 mV/V
Excitation Voltage	5 +/- 0.5 VDC	5 +/- 0.5 VDC
Internal Resolution	100,000 Levels (Min.)	100,000 Levels (Min.)
Display increment	50,000 Levels (Approx.)	50,000 Levels (Approx.)
Loadcell	Up to 8 x 350 Ohm	Up to 8 x 350 Ohm
Calibration Method	Software, long-term storage in EEPROM	Software, long-term storage in EEPROM
Decimal point	0 - 3 Digits	0 - 3 Digits
Increment Step	1, 2, 5, 10, 20	1, 2, 5, 10, 20
Keyboard	32 KeyPads	Capacitive Touch Screen
Communication	RS-232C or RS-485 Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200	RS-232C or RS-485 Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
I/O Control	4 x Isolate Input , 6 x DC Driver Output	4 x Isolate Input , 6 x Dry Contract Relay
Function Control	Batching, Mixing, Setpoint	Batching, Mixing, Setpoint
Operating Temperature	0 C - 40 C , < 85% RH	0 C - 40 C , < 85% RH
Power Supply	12-16 V , 1A	12-16 V , 2A
Casing	Aluminum	ABS Plastic
Dimension (W x H x D)	22.5 x 32.5 x 18.0 cm.	22.5 x 32.5 x 18.0 cm.

Specifications subject to change without notice

Commandor

Memory with Data Management Monitor

MiniPC Weighing Model



DESCRIPTION	HP-05K
Display	LCD Graphic 128 x 64 Dots with backlight
Signal Input	RS-232
Keyboard	Keyboard PS/2
Communication	2 x RS-232C Host, Stream and Demand Mode Baud rate 1200,2400,4800,9600,19200
Character	English / TIS Thai (Auto 3 Levels)
Printer Port	Parallel / Serial RS-232C
Memory	Upto 4 x 64 Kbytes
Transaction	1200 Records (Upto 3600 Records)
In-Process	120 Records (Upto 360 Records)
Code Table	250 Company Codes, 250 Product Codes
Operating Temperature	0 C – 40 C , < 85% RH
Power Supply	220 VAC , 1 A
Casing	Stainless Steel
Dimension (W x H x D)	24.0 x 17.0 x 12.5 cm.

Specifications subject to change without notice

Commandor

RM-06 Remote Display



DESCRIPTION	RM-06	RM-12
ชนิดจอแสดงผลภาพ (Display)	Red 7 Segment Super Bright LED	Red 7 Segment Super Bright LED
กำลังไฟ (Power Supply)	210-230 VAC, 50 or 60 Hz, 3A	12-16 V , 3A
สัญญาณ (Input Signal)	Isolate RS-232 or 20 mA Current Loop	Serial RS-232
ขนาดตัวอักษร (Size)	อักษรสูง 4 นิ้ว Module สูง 4.75 นิ้ว	อักษรสูง 2.5 นิ้ว Module สูง 3.0 นิ้ว
จำนวนตัวอักษร (Digits)	6 ตัวเลขแบบ Module แสดงหลักเต็ม	6 ตัวเลขแบบ Module แสดงหลักเต็ม
ช่วงเวลารอสัญญาณ (TimeOut)	3 หรือ 5 วินาที (Jumper)	3 หรือ 5 วินาที (Jumper)
การเลือกสัญญาณ (Protocol)	16 ชนิด (Jumper)	16 ชนิด (Jumper)
การเลือกความเร็ว (Baudrate)	1200,2400,4800 (9600 Option)	1200,2400,4800,9600
จุดทศนิยม (Decimal point)	0 – 3 ตำแหน่ง (Jumper)	0 – 3 ตำแหน่ง (Jumper)
ตัวกล่อง (Casing)	Coating Steel with Hood	Aluminum
Dimension (W x H x D)	69.0 x 21.0 x 14.0 cm.	45.0 x 14.0 x 10.0 cm.



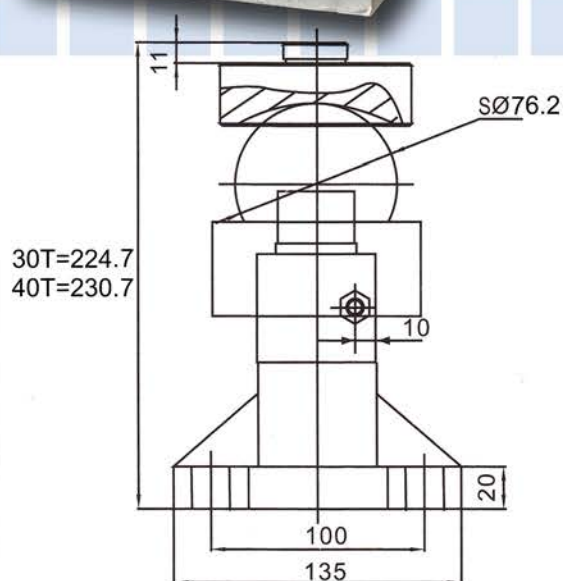
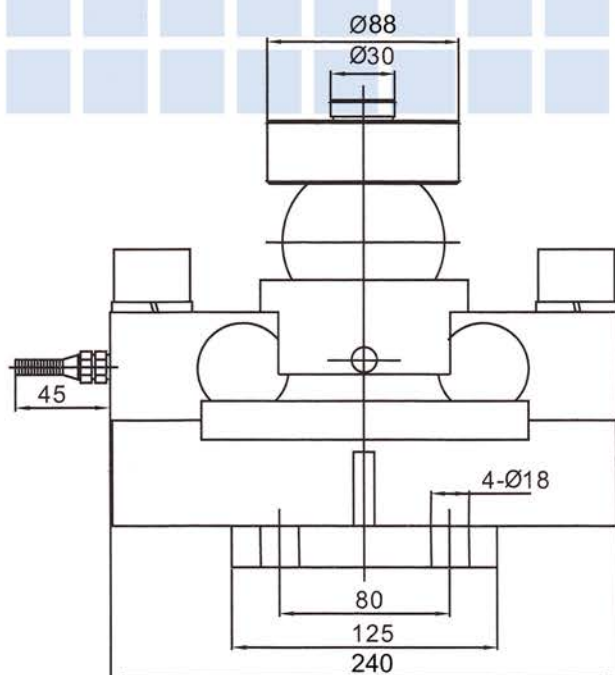
DESCRIPTION	HP-JB	HP-DJ	HP-DG
SUMMING TYPE	Analog to Analog	Analog to Digital	Digital to Digital
RESISTANCE ERROR (%)	0.1	0.1	0.0
VARIABLE ADJUST	10 KΩ	10 KΩ	50 %
LOADCELL CHANNEL	4, 6, 8	4, 6, 8	4 - 8
LOADCELL CABLE (mm.)	4.5 – 7.8	4.5 – 7.8	4.5 – 7.8
CABLE GLAND	PG9	PG9	PG9
DIMENSION (cm.)	27.0 x 20.0 x 6.0	27.0 x 20.0 x 8.5	27.0 x 20.0 x 8.5
CASING	Stainless Steel	Stainless Steel	Stainless Steel

Specifications subject to change without notice

High Accuracy Loadcell Commandor

QS/QSD

Double End Shear Beam

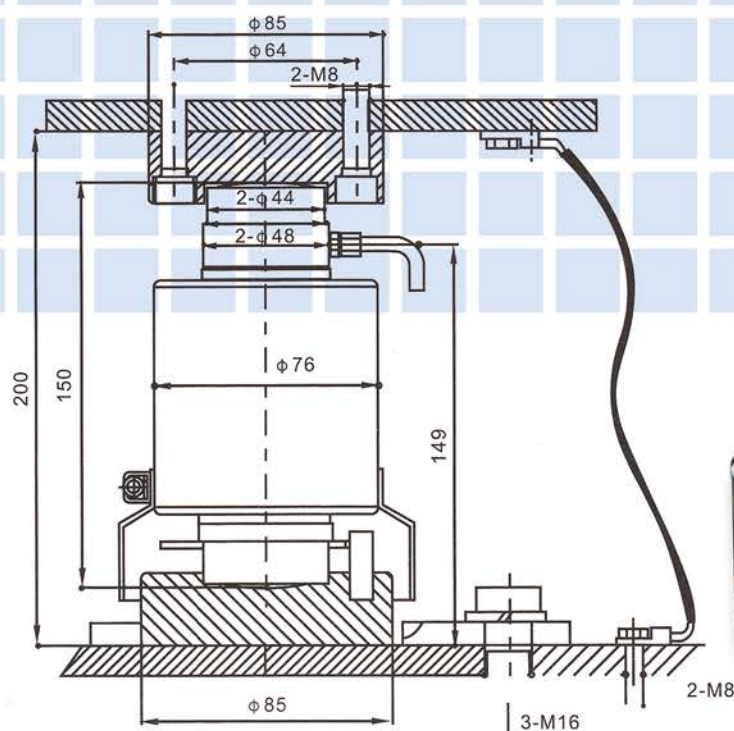


DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	10 T , 30 T , 40 T	Accuracy class	C3
Sensitivity	2 ± 0.002 mV/V	Method	Double End Shear Beam
Non-linearity	± 0.03% FS.	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	± 0.03% FS.	Service Temp. Range	-30°C to 70°C
Creep (30min.)	± 0.02% FS.	Safe load limit	150% FS.
Temp. effect on Zero	± 0.02% FS. / 10°C	Ultimate load	200% FS.
Temp. effect on Sensitivity	± 0.02% FS. / 10°C	Nominal of range excitation	5 to 10 VDC
Input resistance	750 ± 10 Ω	Protection class	IP68
Output resistance	703 ± 5 Ω	Material	Alloy Steel
Insulation resistance	≥ 5000 MΩ	Cable length	16 m.

Specifications subject to change without notice

High Accuracy Loadcell Commandor

ZSFY/ZSFD *Compression Loadcell*



DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	30 T, 40 T	Accuracy class	C3
Sensitivity	$2 \pm 0.002 \text{ mV/V}$	Method	Compression
Non-linearity	$\pm 0.03\% \text{ FS.}$	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	$\pm 0.03\% \text{ FS.}$	Service Temp. Range	-30°C to 70°C
Creep (30min.)	$\pm 0.02\% \text{ FS.}$	Safe load limit	150% FS.
Temp. effect on Zero	$\pm 0.02\% \text{ FS.} / 10^{\circ}\text{C}$	Ultimate load	250% FS.
Temp. effect on Sensitivity	$\pm 0.02\% \text{ FS.} / 10^{\circ}\text{C}$	Nominal of range excitation	5 to 10 VDC
Input resistance	$700 \pm 20 \Omega$	Protection class	IP68
Output resistance	$706 \pm 7 \Omega$	Material	Alloy Steel
Insulation resistance	$\geq 5000 \text{ M}\Omega$	Cable length	16 m.

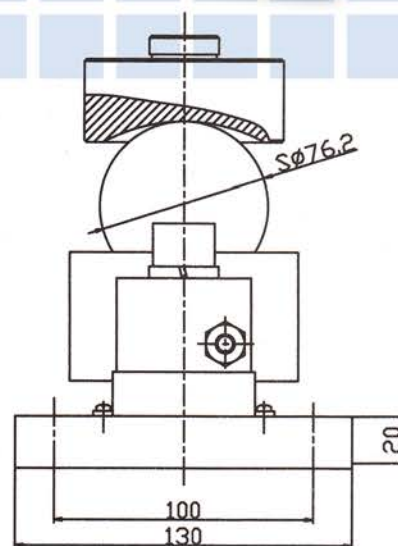
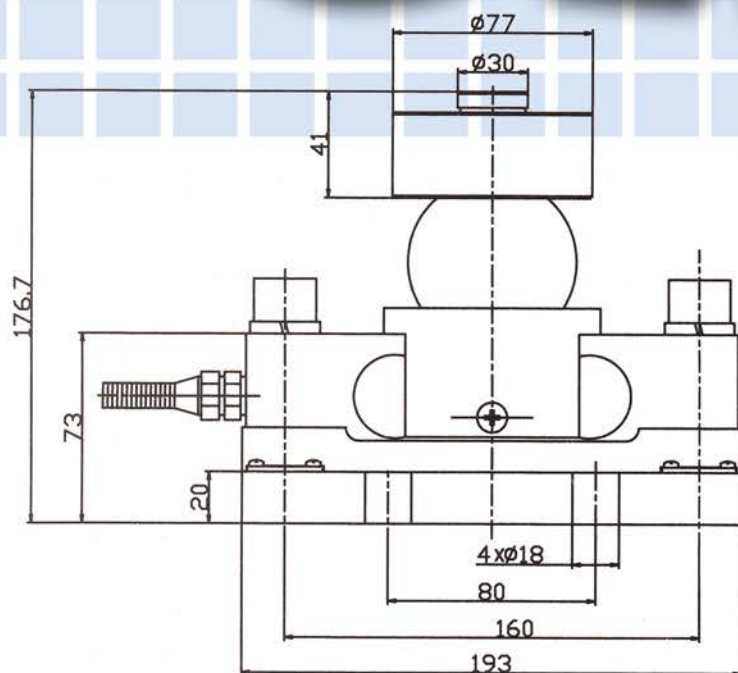
Specifications subject to change without notice

Commandor

High Accuracy Loadcell

ZCB

Double End Shear Beam



DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	10 T , 30 T	Accuracy class	C3
Sensitivity	$2 \pm 0.002 \text{ mV/V}$	Method	Double End Shear Beam
Non-linearity	$\pm 0.03\% \text{ FS.}$	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	$\pm 0.03\% \text{ FS.}$	Service Temp. Range	-30°C to 70°C
Creep (30min.)	$\pm 0.02\% \text{ FS.}$	Safe load limit	150% FS.
Temp. effect on Zero	$\pm 0.02\% \text{ FS.} / 10^\circ\text{C}$	Ultimate load	200% FS.
Temp. effect on Sensitivity	$\pm 0.02\% \text{ FS.} / 10^\circ\text{C}$	Nominal of range excitation	5 to 10 VDC
Input resistance	$750 \pm 10 \Omega$	Protection class	IP68
Output resistance	$703 \pm 5 \Omega$	Material	Alloy Steel
Insulation resistance	$\geq 5000 \text{ M}\Omega$	Cable length	16 m.

Specifications subject to change without notice

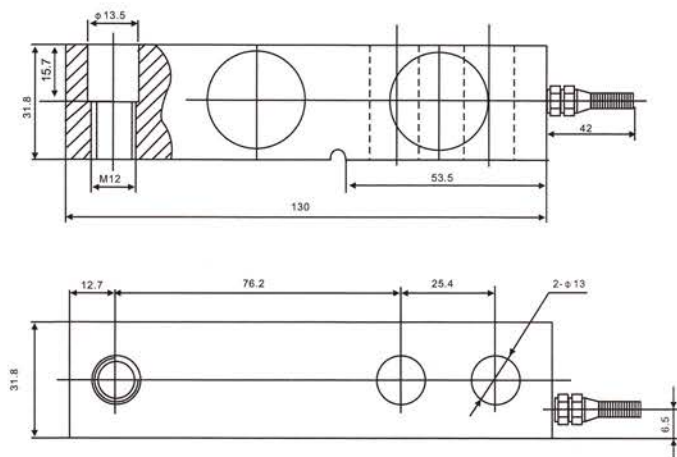
Commandor

High Accuracy Loadcell

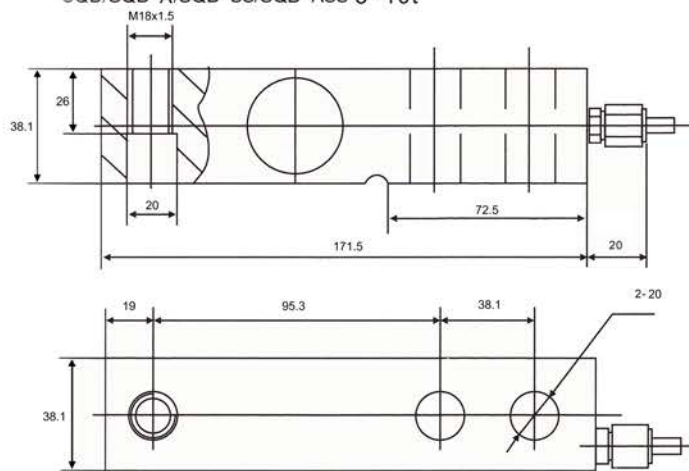
SQB
Shear Beam



SQB/SQB-A 0.25~2.5t



SQB/SQB-A/SQB-SS/SQB-ASS 3~10t



DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	0.5 T, 1 T, 2 T, 3 T, 5 T	Accuracy class	C3
Sensitivity	3 ± 0.003 mV/V	Method	Shear Beam
Non-linearity	± 0.03% FS.	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	± 0.03% FS.	Service Temp. Range	-30°C to 70°C
Creep (30min.)	± 0.02% FS.	Safe load limit	150% FS.
Temp. effect on Zero	± 0.02% FS. / 10°C	Ultimate load	200% FS.
Temp. effect on Sensitivity	± 0.02% FS. / 10°C	Nominal of range excitation	5 to 10 VDC
Input resistance	400 ± 20 Ω	Protection class	IP68
Output resistance	352 ± 3 Ω	Material	Alloy Steel
Insulation resistance	≥ 5000 MΩ	Cable length	3 m.

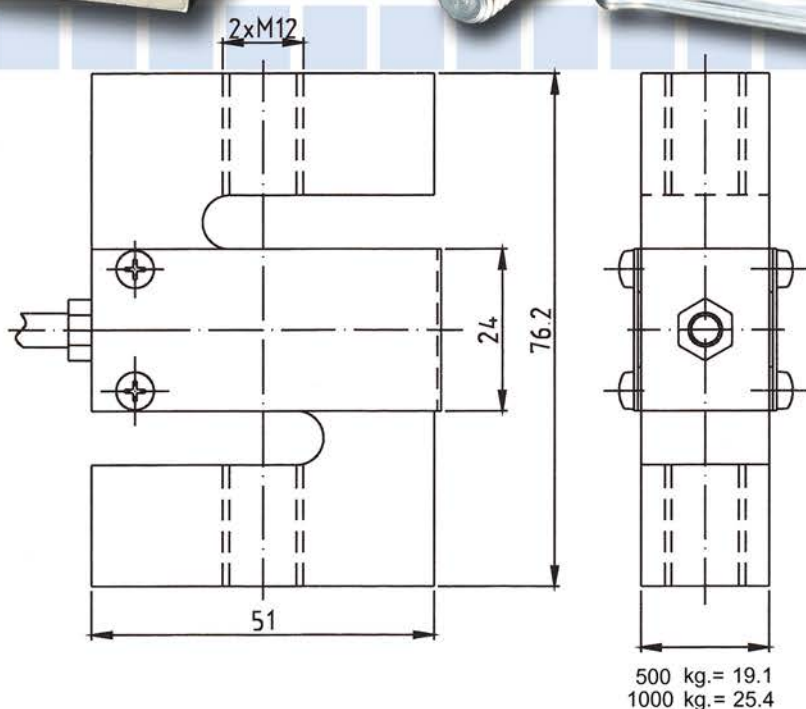
Specifications subject to change without notice

Commandor

High Accuracy Loadcell

DEF

Tension Loadcell



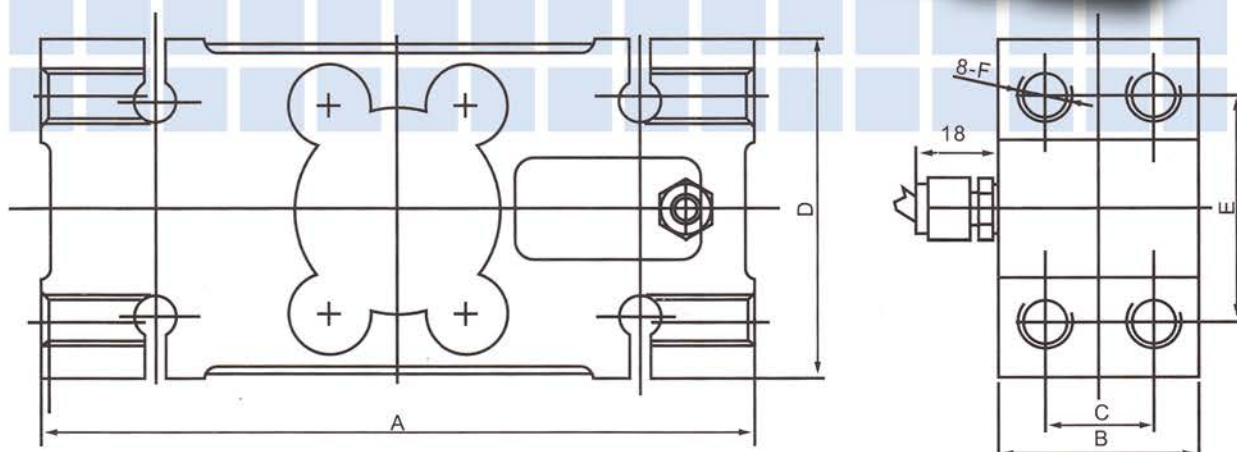
DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	100 Kg., 500 Kg., 1000 Kg.	Accuracy class	C3
Sensitivity	$3 \pm 0.003 \text{ mV/V}$	Method	Tension
Non-linearity	$\pm 0.03\% \text{ FS.}$	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	$\pm 0.03\% \text{ FS.}$	Service Temp. Range	-30°C to 70°C
Creep (30min.)	$\pm 0.03\% \text{ FS.}$	Safe load limit	150% FS.
Temp. effect on Zero	$\pm 0.02\% \text{ FS.} / 10^{\circ}\text{C}$	Ultimate load	200% FS.
Temp. effect on Sensitivity	$\pm 0.02\% \text{ FS.} / 10^{\circ}\text{C}$	Nominal of range excitation	5 to 10 VDC
Input resistance	$400 \pm 20 \Omega$	Protection class	IP67
Output resistance	$352 \pm 5 \Omega$	Material	Alloy Steel
Insulation resistance	$\geq 5000 \text{ M}\Omega$	Cable length	3 m.

Specifications subject to change without notice

Commandor

High Accuracy Loadcell

ILGB
Shear Beam



Rated Load	A	B	C	D	E	F
50~200	156	44	24	75	50	M12
250~500	146	60	36	95	70	M12
750~2000	176	76	46	125	95	M18

DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity	100 Kg. , 200 Kg.	Accuracy class	C3
Sensitivity	2 ± 0.2 mV/V	Method	Shear Beam
Non-linearity	$\pm 0.03\%$ FS.	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	$\pm 0.03\%$ FS.	Service Temp. Range	-30°C to 70°C
Creep (30min.)	$\pm 0.03\%$ FS.	Safe load limit	150% FS.
Temp. effect on Zero	$\pm 0.02\%$ FS. / 10°C	Ultimate load	200% FS.
Temp. effect on Sensitivity	$\pm 0.02\%$ FS. / 10°C	Nominal of range excitation	5 to 10 VDC
Input resistance	400 ± 20 Ω	Protection class	IP68
Output resistance	352 ± 3 Ω	Material	Alloy Steel
Insulation resistance	≥ 5000 M Ω	Cable length	3 m.

Specifications subject to change without notice

Commandor

High Accuracy Loadcell

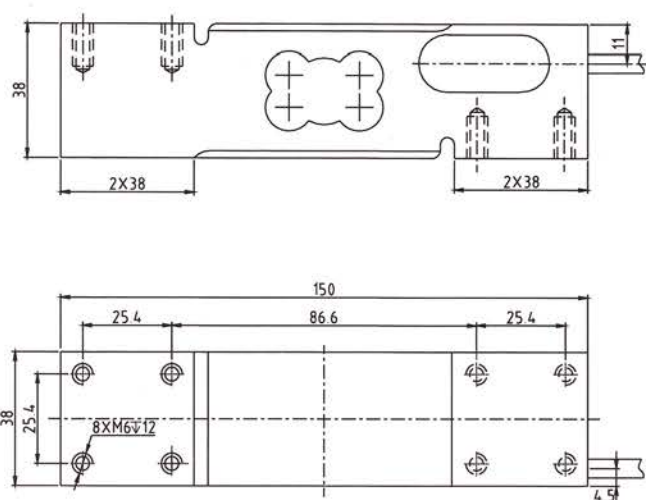
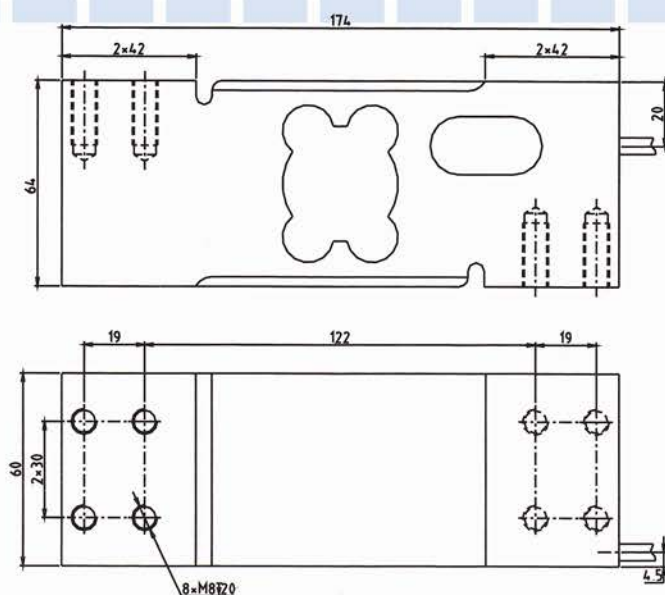
UDA

Single Point Loadcell



AMI

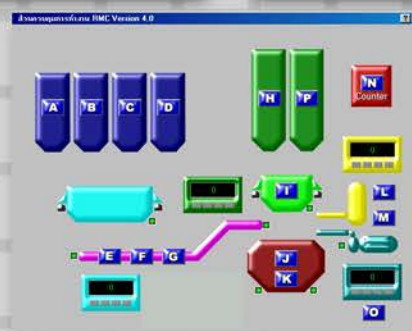
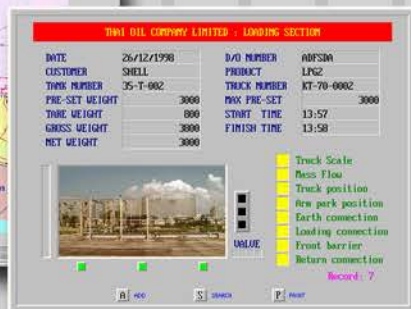
Single Point Loadcell



DESCRIPTION	SPECIFICATION	DESCRIPTION	SPECIFICATION
Capacity (Kg.)	UDA=150,300,500 AMI=50	Accuracy class	C3
Sensitivity	$2 \pm 0.2 \text{ mV/V}$	Method	Single point Shear Beam
Non-linearity	$\pm 0.02\% \text{ FS.}$	Nominal Temp. Range	-10°C to 40°C
Hysteresis error	$\pm 0.02\% \text{ FS.}$	Service Temp. Range	-20°C to 60°C
Creep (30min.)	$\pm 0.02\% \text{ FS.}$	Safe load limit	150% FS.
Temp. effect on Zero	$\pm 0.02\% \text{ FS.} / 10^\circ \text{C}$	Ultimate load	200% FS.
Temp. effect on Sensitivity	$\pm 0.02\% \text{ FS.} / 10^\circ \text{C}$	Nominal of range excitation	5 to 10 VDC
Input resistance	$404 \pm 15 \Omega$	Protection class	IP65
Output resistance	$350 \pm 3 \Omega$	Material	Aluminum
Insulation resistance	$\geq 2000 \text{ M}\Omega$	Cable length	1.8 m.

Specifications subject to change without notice

Application Software



Truck 8.9

Generation

