



TM (Tension Meter)



Product Introduction

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Marketing Div.



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CAS

TM provides ideal and cost-effective solutions for monitoring and controlling Tension and overhead loads in various industrial applications such as shipyards, construction sites and foundries etc. It is designed in IP65 waterproof aluminum enclosure for protection against moisture, dust and rough usage. And TM features Largest LCD display, Conversion of various units, Long battery operating time and linkable with TWN etc.

TM-0.5~15



TM-25, 50



◆ Wide range of Capacities

- 500kg(1,000lb)~50t(100,000lb)

◆ IP65 Waterproof enclosure

- Waterproof aluminum enclosure for protection against moisture, dust and rough usage.



1-2. Features

◆ Large LCD display (Character height : 1.2inches, 30mm)

- Weights are easily viewed with large LCD display.

◆ Conversion of Various units

- kg, lb, N, kN(x1000N), daN,
ton(Short ton or Long ton),
x1,000kg(Metric ton)

1.2inch
(30mm)



◆ 5 function keys for easy and simple operation

◆ Set points for relay control

◆ Long battery operating time

- Operates on four(4) AA-size 1.5V alkaline batteries for approx. **500 hours** in wire communication and approx. **44 hours** in wireless communication.



◆ Various communication interfaces

- TM basically offers RS-232C, RS-485 and 3 Set-point ports and two optional wireless communications, Bluetooth and Zigbee, to be connected with external equipments.



Wire type

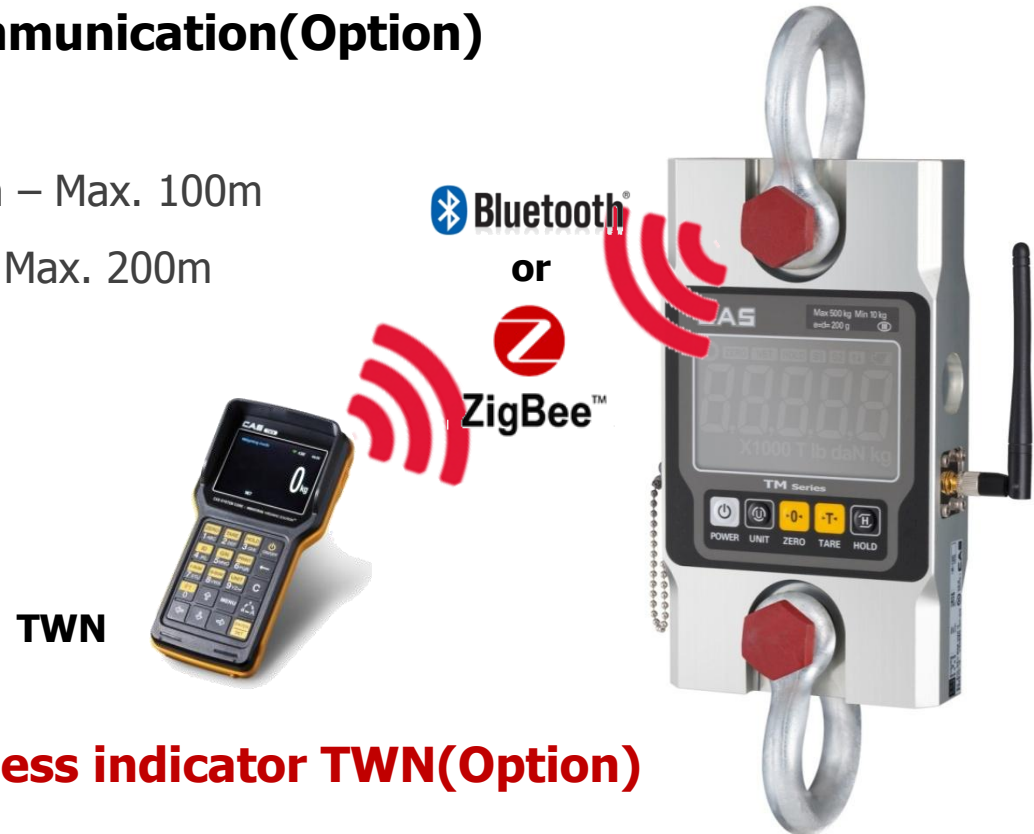


Wireless type



◆ Two options for wireless communication(Option)

- Bluetooth or Zigbee
- Communication distance : Bluetooth – Max. 100m
Zigbee – Max. 200m



◆ Linkable with handheld wireless indicator TWN(Option)

- User can connect TM with TWN in BLUETOOTH or Zigbee and read easily a weight value, control TM through TWN.

2-1. Specifications

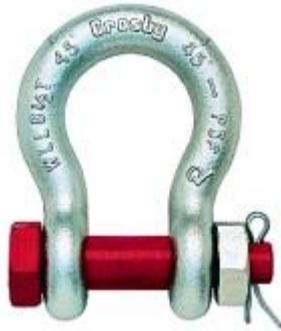


RESPONSIBILITY GLOBAL CAS

Model		TM(Tension Meter)							
Max. Capacity(kg)		500	1,000	3,000	5,000	10,000	15,000	25,000	50,000
Division(kg)		0.5	1	2	5	20	50	50	100
Accuracy		≤ 0.1% of full capacity				≤ 0.2% of full capacity			
Unit		kg, lb, N, kN(x1000N),daN , ton(Short ton or Long ton), x1,000kg(Metric ton)							
Safety Factor		10:1	10:1	10:1	10:1	5:1	5:1	5:1	5:1
Power		4 AA size 1.5V alkaline batteries / 0.3~0.5W							
Battery operating time		Wire type: Approx. 500 hours/ Wireless type: Approx. 44hours (In case of 2850mA)							
Display		5 digit LCD display / Character height : 1.2inches(30mm)							
Operating Temperature		-20~60℃							
Protection Class		IP65							
Material		Aluminum							
Communication	Standard	RS-232C/RS485/ Setpoint(3 points)							
	Option	Bluetooth & Zigbee wireless communication							
Wireless Communication Distance		Bluetooth : Max. 100m / Zigbee : Max. 200m (only for open site)							
Options		Shackle, TWN , 20M Cable, Carrying case							
Product Weight(kg)		2.3	2.3	2.5	3.3	5.1	8.5	10.0	18.0

2-2. Options

1. Crosby Shackle (G-2130 series)



2. TWN



3. 20m Cable



4. Carrying case(only for until 5,000kg)



3-1. Applications

General Crane weighing



Steel mill



Shipbuilding



Shipyard



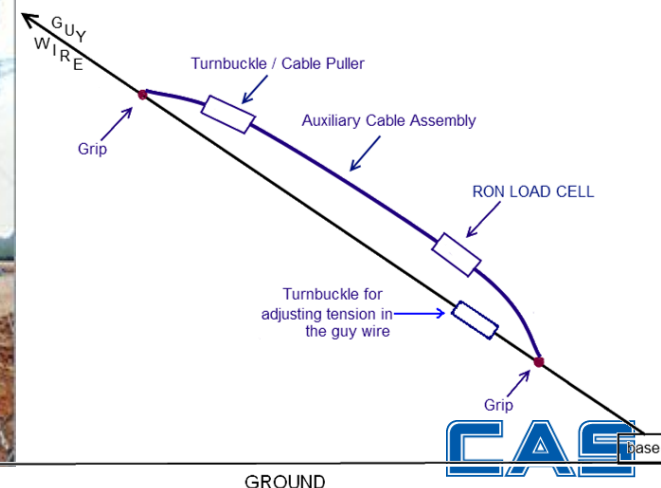
Overload Protection



Tension testing



Measuring Tension



3-2. Applications(Wired type)



PLC

or



Field signal

Cable
(Setpoint)



TM
(Tension Meter)

Cable
(RS-232C/RS-485)



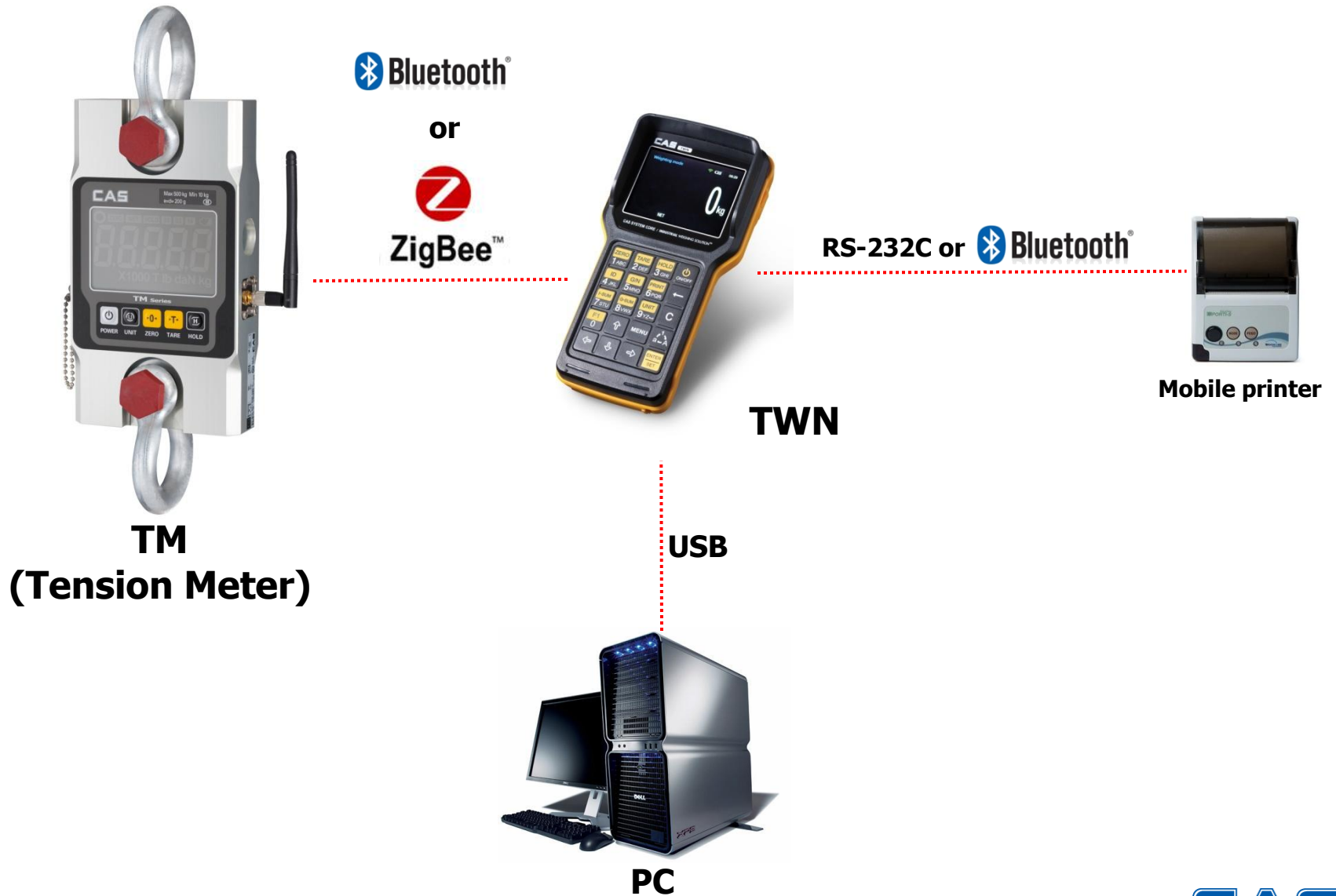
CD Series
(Remote Display)

or

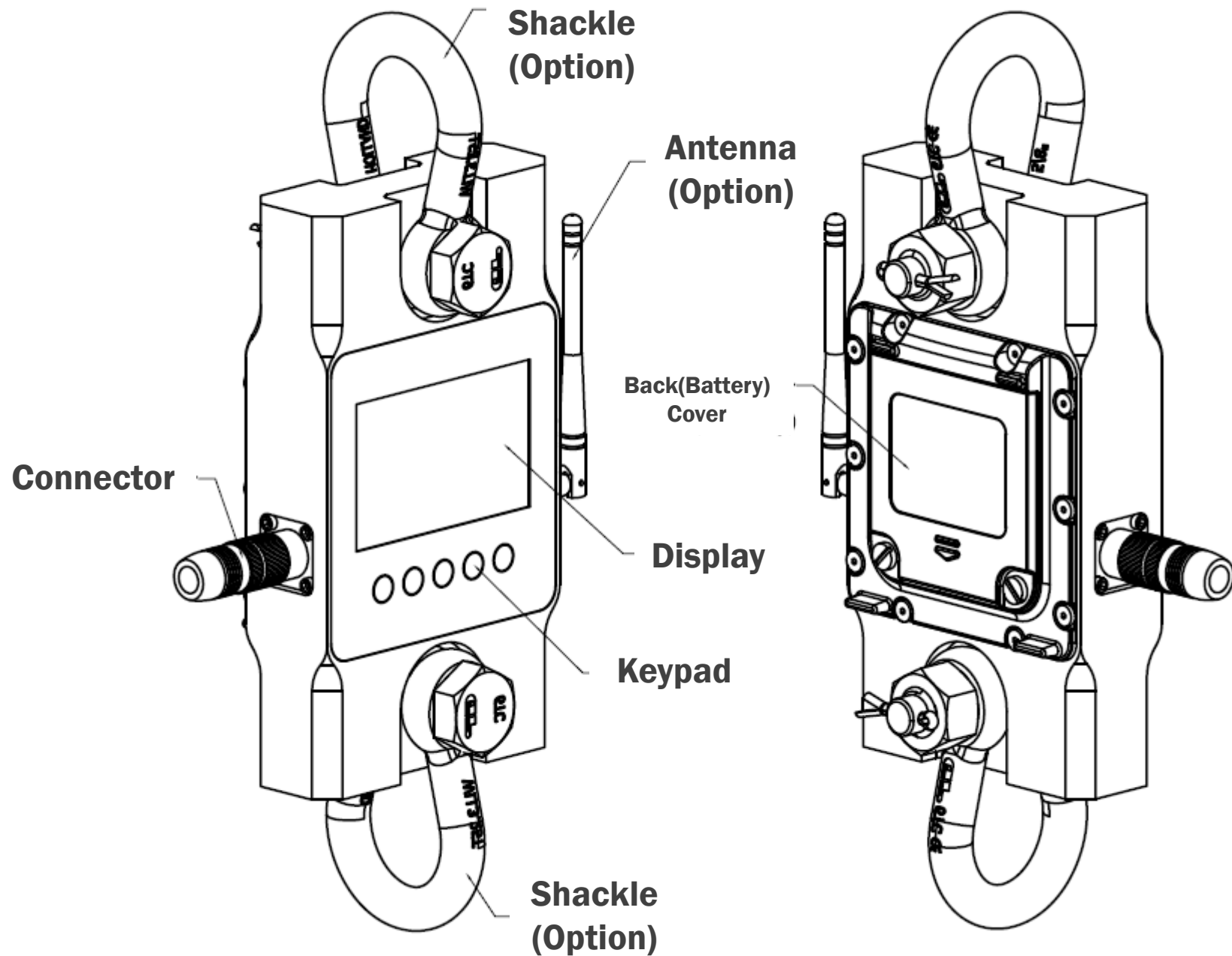


PC

3-3. Applications(Wireless type)

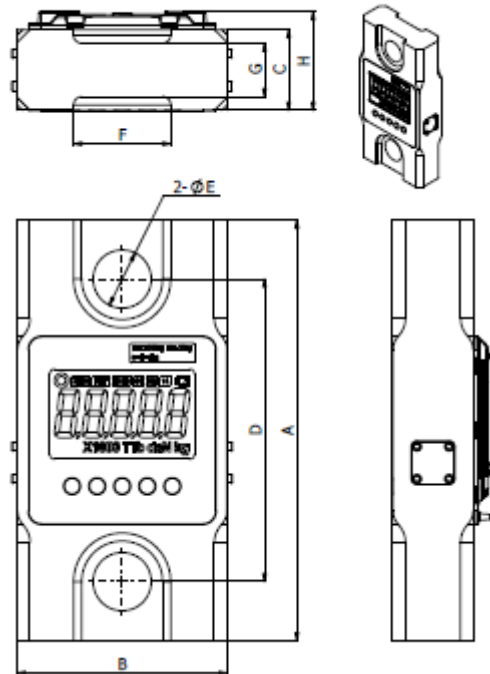


4-1. Dimensions

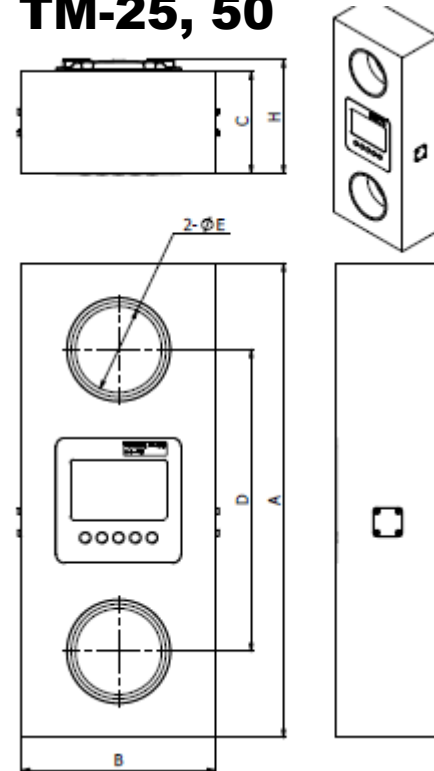


4-2. Dimensions

TM-0.5~15



TM-25, 50



MODEL	TM series							
Capacity(kg)	500	1,000	3,000	5,000	10,000	15,000	25,000	50,000
Dimension A(mm)	220	220	220	260	300	340	380	440
Dimension B(mm)	120	120	128	130	140	152	170	180
Dimension C(mm)	42	42	42	50	60	70	72	95
Dimension D(mm)	165	165	165	187	205	226	248	280
Dimension E(mm)	21	21	21	28	40	48	65	80
Dimension F(mm)	44	44	44	60	80	100	-	-
Dimension G(mm)	24	24	24	33	46	53	-	-
Dimension H(mm)	53	53	53	61	61	81	83	106
Product Weight(kg)	2.3	2.3	2.5	3.3	5.1	8.5	10.0	18.0
CROSBY SHACKLE(Optional)	G-2130 5/8"	G-2130 5/8"	G-2130 5/8"	G-2130 7/8"	G-2130 1-1/4"	G-2130 1-1/2"	G-2130 1-3/4"	G-2130 2-1/2"
SHACKLE WEIGHT(Pair)	1.24	1.24	1.24	3.58	10.62	17.24	30.8	89.2