



Technical Proposal

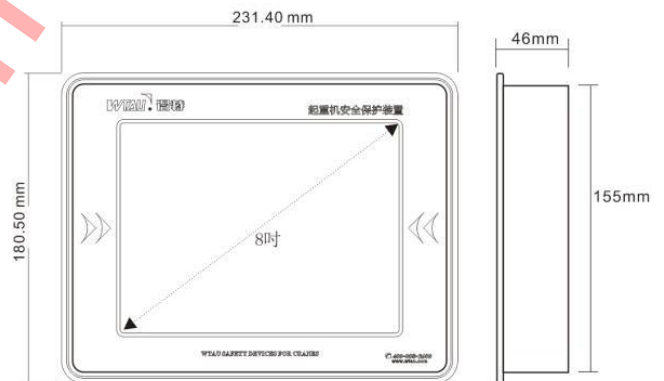
Offshore crane load moment indicator

NO	Name	Specification	Quantity	Remark
1	LCD screen	WT-W650v3	1	1. weather protection :waterproof and dust proof/ Working humidity: 95% (25 °C)/IP class: IP 65 , for day/night operation 2.operation temperature : -20 °C ~ 70 °C 3.power supply: DC18-72V or AC110-350V 4..System accuracy : $\leq \pm 3\%$ (F.S)
2	Load cell(main andaux hoist)	WS-ZX(SHL)	2	1. IP class :IP 68 2. Operating Temperature: -30~+70°C 3. power supply: loop powered by display unit (WT-W650) 5.Safe overload: 150%F.S 6.measurement accuracy: 1.0±0.005mV/V 7.Range: start from 500KG
3	Angle sensor	WS-JDC-100 angle sensor-L (left)/R(Right)	1	1.Sensor type : Electronic 2. IP class : IP 68(boom foot mounted IP 65) 3.Operation Temperature: -30~+70°C Humidity range:10-95% 4.Power supply: loop powered by display unit (WT-W650) 5.Range: -10°~+110°
4	Anti two block switch	WS-GJ-1	2	1. power supply :DC12V--AC380V 2. Current : 5A
5	Data control box	WT-W650v3	1	1. Unit type: IP 66. 2. Power supply : DC18-72V or AC110-350V
6	Wind Speed	WS-FSY	1	1. Range 1.0- 60 m/s 2. Acuraci <30m/s 3. Starting wind speed 0.7m/s

7	Installation Kit	<p>Mounting bracket Connecting cables(offshore standard) Manual and spare part list Other kits</p>
8	Program	Software for main hoist and aux hoist

Details of Load moment indicator

1. LCD screen



Specifications

The WT-W650 display unit is usually equipped with WT-W650 data control box.

1.1 WT-W650 display

Specifications

1. material: stainless steel
2. weather protection :waterproof and dust proof/ Working humidity: 95% (25 °C)/IP class: IP 65 , for day/night operation
- 3.operation temperature : -20 °C ~ 70 °C
- 4.power supply: DC18-72V or AC110-350V
- 5. display :boom load and maxmum load , crane capacity**
- 6. display :boom angle 0-90degrees.boom length.**
- 7.display :parts line (reeving)
- 8.display: radius unit: m
- 9.type of display :8 inch touched industrial colorful LCD display/ Day and night viewable

10. Alarm: internal Alarm horn Visual and auditory dual alarm

Alarm set points : Audible alarm when 100% Capacity has been reached. Optical alarm (red light) when 85% , other alarm setting like buzzer/ Boom angle high limit/ Boom angle low limit is adjustable

12. System accuracy : $\leq \pm 3\%$ (F.S)

13. display wind speed

Attached function: Unexpected power outages data protection features.

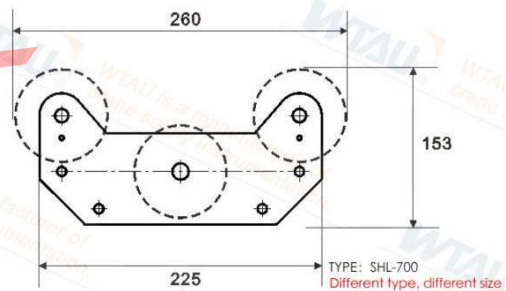
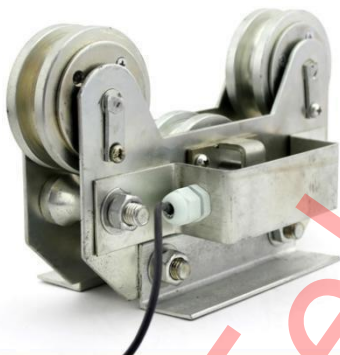
With the operation data logging capabilities, dangerous operation to return to the view.

The cumulative load weight record/ Cumulative record cycles/ Total running time record/

Main hook and rope maintenance tips.

2. Load cell

WTAU *WTAU is a manufacturer of crane safety instrumentation.*



Single rope tension range and rope diameter be needed to select



2. Three pulley type load sensor (inside is Pin type) ---- 2 sets

Model: WS-ZX(SHL) three Pulley type tension sensor

Specification

1. sensor type: electronic, suit for testing, calibration and certification.

2. IP class : IP 68

3. Operating Temperature: $-30 \sim +70^{\circ}\text{C}$

4. power supply: loop powered by display unit (WT-W650)

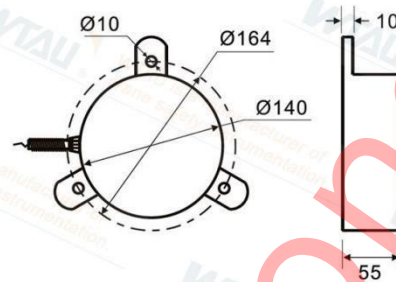
5. load testing:

Safe overload: 150% F.S

max overload 250% F.S

6. measurement accuracy: $1.0 \pm 0.005 \text{ mV/V}$

3.Angle sensor



3. Boom angle sensor

Type :WS-JDC-100 angle sensor-L (left)/R(Right)

Specification

- 1.Sensor type : Electronic
- 2.Weather protection: :6
- IP class : IP 68 boom foot mounted IP 65
- 3.Operation Temperature: -30~+70°C
- Humidity range:10-95%
- 4.Power supply: loop powered by display unit (WT-W650)
- 5.Range: -10°~+110°
- 6.Linearity:0.05,0.1,1%

4.Anti Two Block Switch



Anti two block switch model :WS-GJ-1

- 1.power supply :DC12V--AC380V
- 2.Current : 5A

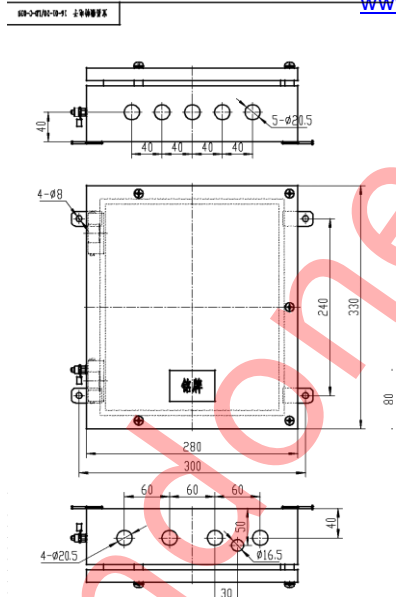
5. Data control box



Data control box

Specifcaiton:

1. model : WT-W650V3 data control box
2. Input : AC 110, 45 to 60HZ(rig supply). Floating neutral power supply.
3. Output: control signal, 4-20mA /RS 485
4. Weather protection: Safe area
5. Operation temperature: -20 °C ~ 70 °C



6. Wind Speed



测量范围: 1.0~60m/s
 准确度: <30m/s ± (0.5 + 0.05v) ≥30
 分辨率: 0.1m/s
 起动风速: <0.7m/s
 工作环境: -30℃ ~ +60℃
 底座安装内孔: φ68

Range: 1.0~60m/s
 Accuracy: <30m/s ± (0.5 + 0.05v) ≥30m/s ±
 Resolution: 0.1m/s
 Starting wind speed: <0.7m/s
 Temperature: -30 ~ +60℃
 Base mounting hole: φ68

7. Accessory : bracket, connection cables. uer manual and other parts