ARM1500
MODULAR ROBORIGGER

The ARM1500 module is an orientation control system that can be utilized in many configurations. It contains the battery, motor, flywheel and control systems to work in different configurations and with different accessories. Using Roborigger gives the following advantages:

- **Do the work faster.** Orientation is done whilst the load is in transit - no need to attach and remove tag lines.
- **Do the work with less people.**. You don't need personnel on tag lines.
- **Allow work to continue in challenging conditions.** Work efficiently at higher wind speeds. Loads can be safely lifted where tag lines would get caught on wires or structure.
- **Greatly improved safety.** Loads can be lifted and landed without the need for people to be in the vicinity. Loads are prevented from spinning and hitting structure - a major cause of dropped objects and costly damage.
- **Fast Payback.** Roboriggers increasing the lifting efficiency of the crane and its team by an average of 15% on routine works. On large complex projects the full purchase price is saved within 3 months. Case studies for this can be supplied.

The ARM1500 module has sufficient capacity to control the orientation of a 40ft container in winds of 15kn (27km/hr) gusting to 20kn (36km/hr). The ability to control the load depends on the mass moment of inertia of the load and its windage.

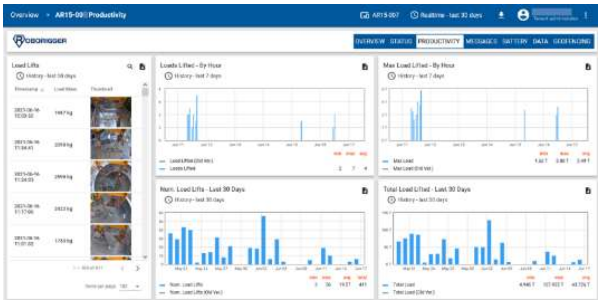
ROBORIGGER includes a video camera and load cell and is internet connected by Wi-Fi and 3g/4g so that all lifts are recorded on the internet database complete with date, time, location, weight and a high-resolution image. Load ID can also be recorded. This gives the user the ability to track all loads lifted and to analyse performance and productivity. The IOT is also used for online condition monitoring.

ARM1500-50
This unit has a 50t WLL upper spreader and a lower deflecting spreader. Loads can be attached to the upper spreader at sling angles from vertical to 45 degrees. The slings can be joined to a single hook under the spreader for controlling loads with multi leg sling sets coming to a single link For 24x7 operation, the batteries can be relocated to an external swappable battery pack that sits under the module. It is also possible to operate Roborigger continuously by providing a charging supply of 1.5 to 2.5kW through the 110VAC to 250VAC charging port. This can come from a generator below (e.g. on a vacuum lift or magnetic lift spreader) or from a cable supply via the crane boom. A 75t capacity spreader can also be used with the unit, However the load controllability is generally governed by the load length and the wind.

LIFTING CONFIGURATION OPTIONS



Stand-alone Spreader mode Spreader & hook



Data is captured and saved to the internet database

KEY FEATURES:

- Integrated load cell
- Integrated IP camera capable of providing video feed and still pictures of load
- 3g/4g modem to provide internet connectivity
- Wi-Fi for transmission of video
- Wireless remote using off the shelf 2.4 GHz, 433MHz or 900MHz crane controller
- 12 hour+ battery pack. Optional 24x7
- Onboard battery charger:
- Remote monitoring using ROBORIGGER IoT

SPECIFICATIONS:

WLL: 50 t (lift spreader capacity).

PROOF LOADING: 1.5 x WLL

Operating temp: 0 to +55C

Weight: module 1,080 kg (without lift frame)
Designed to AS1418 class U3 loading Q3
Fatigue life 100,000 cycles spectrum Kp=1
Complies with AS1418, AS 4991 Lifting Equipment
DnVGL-ST-0378
ASME B30.20-2021 ASME BTH-1-2020 Below-the-Hook Lifting Devices

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ARM1500
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OPTIONS

ARM1500-50





KEY FEATURES:

- ARM1500 module with 59t WLL upper spreader and lower spreader that supports negative sling angles.
- 4 pins allow quick attach/release to structure or base

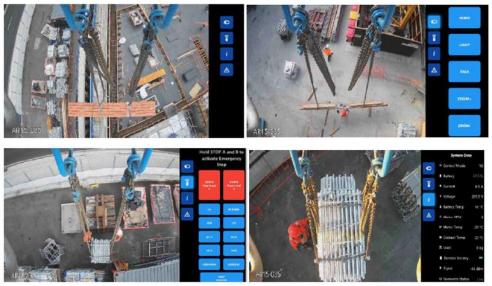
SPECIFICATIONS:

WLL: 50t

Module Size: 1570 (W) x 1570 (W) x 1500 (H)

Weight: 1,900 kg

SMART SCREEN



KEY FEATURES:

- Smartscreenis USB powered and attaches to crane cabin window with suction mount.
- No external wiring or installation is required
- Long range wifi in Roborigger can communicate with Smartscreen without a repeater.
- Smartscreen has a fully functional touch screen remote control
- Press to talk allows communication via Roborigger speaker
- Data screen shows Roborigger health
- Screen can control container spreader twistlock open and close

EXTERNAL BATTERY PACK





KEY FEATURES:

- Quick swap battery pack and external charger allows 24x7 operation.
- Battery pack attaches via 4 stab in pins to allow easy and fast changeout.
- Unit can also be supplied with a diesel generator that allows continuous or as required charging whilst in operation

FOOT PEDALS (USB)

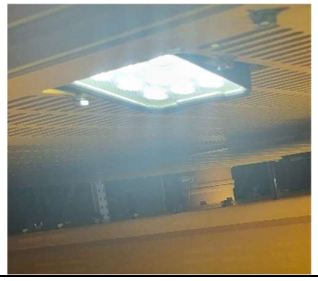


KEY FEATURES:

- USB powered foot pedals plug into the Smartscreen
- Pedals can be used for manual control (clockwise/ccw) or for GOTO A / GOTO B mode. Touch screen selectable

FLOODLIGHT AND LOUDSPEAKER





KEY FEATURES:

- Loudspeaker allows crane operator using the Smartscreen to communicate with the rigging crew via the loudspeaker. This is very useful for warning personnel or requesting a specific rigging arrangement.
- Floodlight is switchable via Roborigger control panel and also via Smartscreen

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