

# ARM1500-35 MODULAR ROBORIGGER



The Roborigger ARM1500-35 is a load controlling system based on the ARM1500 load control module fitted with a 35t WLL spreader and hook system. Roboriggers add value to your project by increasing the lifting efficiency of the crane and its team by an average of 15%. This is achieved by allowing orientation to be done whilst the load is in transit, there being no need to attach and remove tag lines, and having the ability to work efficiently at higher wind speeds. Erection of steelwork at height can be done using one or two fewer personnel as you don't need personnel on tag lines to do the orientation and the structure can be lifted into its final position under wireless control of the personnel making up the connection. Roborigger has a payback greater than three times its cost.

Using Roborigger allows orienting and landing lifted loads to be undertaken without tag lines and the need for people to be in the vicinity of the load. It also prevents loads from spinning and hitting structures which is a major cause of dropped objects. The safety benefits are significant.

The ARM1500 module has sufficient capacity to control the orientation of a 40ft container in winds of 15kn (27km/hr, 8m/sec) gusting to 20kn (36km/hr, 10m/sec). The ability to control the load depends on the mass moment of inertia of the load, its windage and shape.

The ARM1500-35 includes a lower support frame which can be left attached when in operation to allow easy set down or it can be removed for operation and the unit can be landed on the frame after use. For 24x7 operation, we offer an optional battery pack in this frame and by using 2 battery pack frames that can be swapped in a few minutes, operations can continue around the clock.

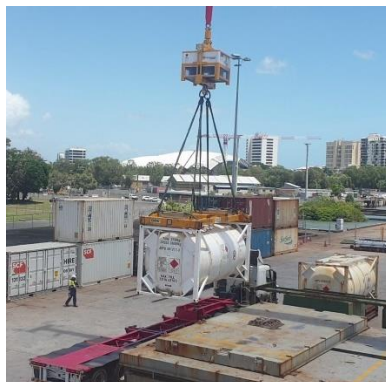
The ARM1500-35 includes a bihook that can carry 35t on one hook or shared on both hooks. It includes our lockable latch to provide peace of mind that the sling will stay on the hook.

ROBORIGGER includes a video camera and load cell and is fully 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.

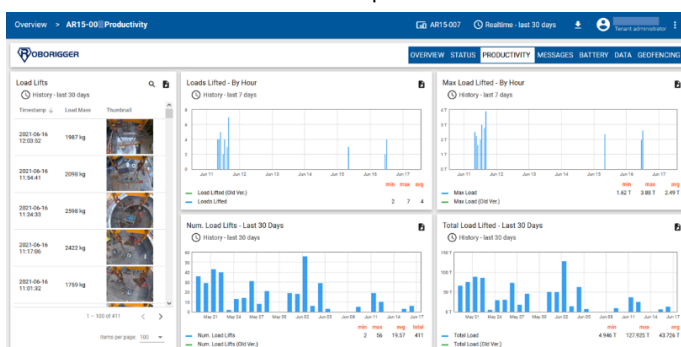
## LIFTING CONFIGURATION OPTIONS



With lower frame



Operation without lower frame



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 for use as crane camera or for remote monitoring
- Wireless remote using off the shelf 2.4 GHz or 433MHz crane controller
- 12-hour+ battery pack. Optional 24x7
- Onboard battery charger: input AC240V 15A single phase.
- Remote monitoring using ROBORIGGER IoT website

## SPECIFICATIONS:

**WLL:** 35 t (lift frame capacity)

**PROOF LOADING:** 70 t

**Module Size:** 1.57 (W) x 1.76 (W) x 2.15m (H)

**Operating temp:** 0 to +55C

**Weight:** module 1,080 kg (without lift frame)

**Weight:** 2,560 kg including lift frame

AS1418 class U3 loading Q3

Fatigue life 100,000 cycles spectrum Kp=1

Design approval - Lloyds register. CE compliant.

## ARM1500-35 OPTIONAL FEATURES:

### EXTERNAL BATTERY PACK FOR 24x7 OPERATION

For 24x7 operation, the battery pack can be located in the lower frame. By using 2 battery pack frames that can be swapped in a few minutes, operations can continue around the clock, one charging whilst the other is working.



### GO TO MODE AND FOOT PEDAL CONTROL

GO TO mode allows 2 pre-set orientations A and B to be saved. A single button press then reorientates the load. This requires the optional 10 button remote control. A foot pedal control can be provided to allow the operation to be controlled by the crane operator. This is ideal for repetitive operations such as loading a ship.



### 50T WORKING LOAD LIMIT (WLL) UPGRADE

The 35t unit can be upgraded to 50t unit by adding bolt on extensions to the upper spreader and a dedicated lifting bridle. The 50t load can then be connected to the ends of the upper spreader. The unit still retains its 35t capacity using the swivel and bihook.

