



large scale lifting solutions.

# TIGER

**TELE RADIO**<sup>®</sup>  
REMOTE CONTROL 


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The background of the entire page is a photograph of a construction site at sunset. The sky is a deep orange and yellow, with the sun low on the horizon, creating a strong silhouette effect. Several tower cranes are visible, their long jibs extending across the frame. The overall mood is industrial and dramatic.

Tiger is developed for those of you who need to radio remote control lifting applications like cranes, OHT cranes and electric hoists. When you radio remote control your application with Tiger you get qualities such as duplex communication, CANopen and Modbus - all in the same system. You get feedback from your application - it gives you full control.

All Tiger transmitters and receivers have a duplex function. The receivers can communicate with

one or more external units, e.g. a weight sensor, through serial communication - Modbus. You get visible feedback through the LEDs on the transmitter showing that the communication between the transmitter and the receiver is working. Several transmitters also have a display on which you get further feedback. For example you can get information on the weight of your load if you have connected a weight sensor to your receiver.



With Tiger you get maximum security. Both the system's stop function and two selected relays inside the receivers are SIL 3 IEC 61508 approved. The two selected relays can be programmed in order to obtain extra high function security. Tiger transmits on 433-434 MHz, and you have 69 channels to choose from. This means you can always find a channel to work on, even if there is more radio remote controlling performed nearby. You have a large number of configurations to choose from. For example, you can have the option that each user must log in using a unique RFID tag in order to start the system. This prevents unauthorised persons from using

the system and the application. Another safety precaution is to equip the transmitters with a horn, which both warns you when the battery level is low and if a possible failure should occur.

Tiger complies with the requirements placed in connection with radio remote controlling advanced lifting applications. Both when it comes to technology, safety (SIL 3 IEC 61508), functionality and flexibility. The Tiger software is developed in such a way that it can easily be modified. This means that we can easily adapt the system to fit your needs.

## General information about the Tiger system

- The system transmits on 433 - 434 MHz, 69 channels to choose from.
- Transmitter and receiver with duplex function.
- The system's stop function and two selected relays inside the receivers are SIL 3 IEC 61508 approved.
- The two selected relays have extra high function security.
- The system's software is developed in such a way that it can be easily modified.
- The transmitter and receiver protection is approved for moist and dust according to IP65.
- Each user has to use their own RFID tag to start the transmitter. Unauthorised persons cannot use the system.
- Hamming distance bigger than 9 for decreased interference.
- The radio packages are protected by a 32 bit CRC to ensure the integrity of the radio traffic.



**safety**

## Information about Tiger transmitters

- Visible feedback through the LEDs on the transmitter showing that the communication between transmitter and receiver is working.
- Button transmitter is available with or without a display. This transmitter can show useful information to the user such as weight data, signal strength, battery level, etc.
- All transmitters are equipped with a horn. It warns you when a failure occurs and when the battery level is low.
- Each user has to use their own RFID tag to start the transmitter. Unauthorised persons cannot use the system.
- The transmitter protection is classified as IP65.
- Rechargeable and replaceable battery, Li-ion, with a new attachment.

## Information about Tiger receivers

- The receivers communicate with external units via Modbus.
- The receiver can be supplied with CANopen.
- A large number of configurations on the receivers.
- The receivers accept 12-350V DC and 24-230V AC.
- The receiver protection is classified as IP65.





**feedback**

# Technical specifications.



TRANSMITTER	TX1-A	TX2-A	JD1-A	JD2-A
Frequency (MHz)	433,075 - 434,775	433,075 - 434,775	433,075 - 434,775	433,075 - 434,775
Channels	69	69	69	69
Unique individual code	•	•	•	•
Duplex	•	•	•	•
Number of functions	10x2	12x2	2x2	2x4
Built-in antenna	•	•	•	•
Power supply	Li-ion	Li-ion	Li-ion	Li-ion
Power consumption*	~50-250 mA	~50 mA	~50-250 mA	~50-250 mA
IP class	IP65	IP65	IP65	IP65

\*) Without backlit display



RECEIVER	RX1-A	RX2-A	RX3-A
Frequency (MHz)	433,075 - 434,775	433,075 - 434,775	433,075 - 434,775
Channels	69	69	69
Antenna	External	External	External
Duplex	•	•	•
Power supply	12-350V DC 24-230V AC	12-350V DC 24-230V AC	12-350V DC 24-230V AC
Functions	12	28	12 (CANopen)
Power consumption	~20-1200 mA	~20-1200 mA	~20-1200 mA
Size	256x217x85 mm 10.1 x 8.5 x 3.3 in	256x217x85 mm 10.1 x 8.5 x 3.3 in	256x217x85 mm 10.1 x 8.5 x 3.3 in
IP class	IP65	IP65	IP65

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REMOTE CONTROL



## TELE RADIO AB

Sweden, Main office  
Tel. +46 (0)31-748 54 60  
e-mail: [info@tele-radio.com](mailto:info@tele-radio.com)

[www.tele-radio.com](http://www.tele-radio.com)

## TELE RADIO SVERIGE

Sweden  
Tel. +46 (0)31-724 98 00  
e-mail: [svenge@tele-radio.com](mailto:svenge@tele-radio.com)

## TELE RADIO OÜ

Estonia  
Tel. +372 44 511 55  
e-mail: [eesti@tele-radio.com](mailto:eesti@tele-radio.com)

## TELE RADIO GmbH

Germany  
Tel. +49 (0)94 51-944 8 550  
e-mail: [deutschland@tele-radio.com](mailto:deutschland@tele-radio.com)

## TELE RADIO ASIA

China  
Tel. +86-(0)592-3111168  
e-mail: [china@tele-radio.com](mailto:china@tele-radio.com)

## TELE RADIO TURKEY

Turkey  
Tel. +90 216 574 22 94  
e-mail: [turkiye@tele-radio.com](mailto:turkiye@tele-radio.com)

## TELE RADIO LTD

England  
Tel. +44 (0) 1625 509125  
e-mail: [england@tele-radio.com](mailto:england@tele-radio.com)

## TELE RADIO LLC

North America & Latin America  
Tel. +1 (305) 459 0763  
e-mail: [america@tele-radio.com](mailto:america@tele-radio.com)

## TELE RADIO BV

Benelux  
Tel. +31-(0)70-419 41 20  
e-mail: [benelux@tele-radio.com](mailto:benelux@tele-radio.com)

## TELE RADIO AS

Norway  
Tel. +47-6933 4900  
e-mail: [norge@tele-radio.com](mailto:norge@tele-radio.com)



Preserving the Tiger  
around the world

ISO 9001:2000