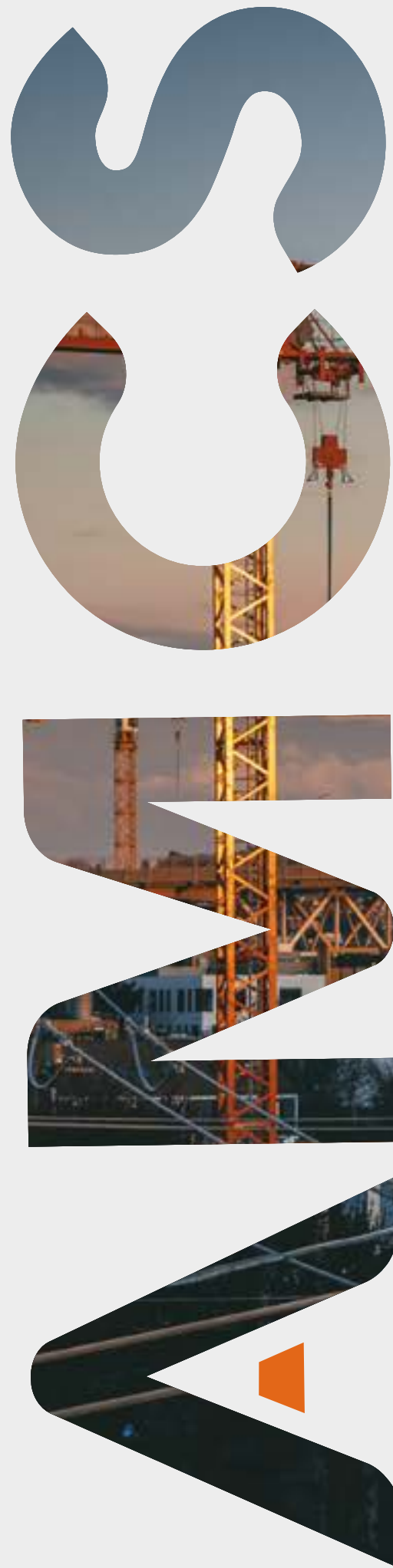




New technologies
dedicated to your safety



www.amcs.fr



Contents

DCS 61-S	04
GUARANTEED SITE SAFETY	
DCS 61-M	08
ANTICOLLISION DEVICE FOR MOBILE MACHINES	
DCS 61-PB	12
ANTICOLLISION DEVICE FOR CONCRETE PLACING BOOMS	
IoT Lifting	14
ENSURE YOUR PRODUCTIVITY	
SUP 61	16
KEEP AN EYE ON YOUR JOB SITE	
CAM 61	17
THE CAMERA OF THE FUTURE	
ANEM 200	18
MONITOR THE WIND SPEED	
AIRCRAFT WARNING LIGHTS	20
BE VISIBLE	
A WIDE RANGE OF SERVICES	21
A WORLDWIDE NETWORK OF CERTIFIED INSTALLERS	23

OUR CHAIRMAN'S FOREWORD

With great pleasure, I introduce to you a company that has been able to climb the ladder step by step and is now proud to have become an innovative, outstanding and competent organization.

To achieve this, our primary concern has always been the entire satisfaction of our customers. It is with this mindset that we have developed an expertise based on perseverance, a work of quality and active listening of our customers.

We have made of anticollision for lifting equipment our specialty.

Son of a crane operator and passionate about this field since my childhood, I naturally created my company to meet a market demand: improving the safety of lifting gear while providing efficient, quality products and guaranteeing a responsive service. My wish is to offer innovative solutions to respond to major projects but also tailor-made and customized offers for every kind of need.

After more than 20 years of activity, we have been able to capitalize on the durability of our products and the involvement of our teams to provide the appropriate services.



The growth of our company results from the proximity, the listening, the responsiveness and the strong mobilization of our various departments. Our ability to adapt and innovate has enabled us to continue to strengthen our leading position in France and internationally for the benefit of our customers.

My ambition is to continue the growth of our SME, to maintain responsiveness and stay close to our customers. Our company continues its path with serenity. Every day we project it into the future, thanks the dynamism of our teams and their desire to constantly improve.

Mohamed Chettibi

WHO ARE WE ?

AMCS Technologies is a key player in the design and manufacturing of high-end electronic systems for the safety and the productivity of the construction sites.

Specialized in on-board safety systems for lifting machinery, the company has become a reference in the construction, port, offshore and industrial sectors.

AMCS Technologies has earned the trust and recognition of its customers through its innovations and flexibility.

OUR VALUES

The involvement, diversity of skills and technical know-how of **AMCS Technologies** employees make it possible to ensure the day-to-day monitoring of each project from the initial request to its implementation in the field.

- Excellence is the guiding idea that defines daily work at the company
- Customized and efficient service
- Passion for the job
- Long-term support
- Transfer of skills through customer training
- Attentive and customer-focused teams

- The loyalty of our customers is our best testimonial
- A duty to advise on best practices
- Strict compliance with standards and regulations
- The flexibility and responsiveness of our teams

User satisfaction is the company's highest priority.

The daily support of the teams, as well as a personalized follow-up as close as possible to your needs, make it possible to meet all the technical challenges.

3 KEY FUNCTIONS



ANTICOLLISION OPTIMAL AND AUTONOMOUS SAFETY SYSTEM

The device calculates in real time and in 3D the distances between each element of the cranes as well as the speeds of their movements. This in order to take control of the crane to ensure a slowdown then a complete immobilization at a pre-set distance from the obstacle.

- Real-time display of interferences and the elements concerned by the risk of collision
- Radio network communication
- Management of interferences between tower cranes, mobile cranes, placing booms, gantries, luffing jib cranes, travelling cranes and retractable boom cranes



DISPLAY UNIT AND DATA LOGGER IMMEDIATE MEMORISATION

Continuous recording and storing of the events related to "prohibited area" and "interference" management functions, allowing direct displaying and/ or downloading to a flash drive. An additional function enables a dynamic recording of certain information concerning the system and/or crane status.



ZONING SIMPLE AND INTUITIVE PROGRAMMING

The system enables to quickly create prohibited overflight areas in 3D (hook height management) directly on the screen by associating geometric shapes with perimeters and static obstacles.

- Real-time display of prohibited zones around the crane
- Management of overflight limits for the jib and/or the load
- Possibility to create prohibited overflight zones such as straight lines, polygons, circles and sectors
- Consideration of a minimum and maximum height for hook management
- Possibility to selectively activate/deactivate zones via the bypass unit

These zones can also be remotely activated/deactivated thanks to our SUP-61 supervisor connected to the radio network.



Whatever the type of crane (saddle jib or luffing jib), the device creates an "adjustable" safety envelope around the machine components.

This envelope takes into account the jib, counter-jib, mast, tower peak and jib tie components as well as the cabin and the hoist cable.



KEY FEATURES

- Multiple target positions can be stored for easy loading and unloading
- Possibility to bypass the system temporarily. The choice is multiple (possibility to bypass zoning (even by selectable zones) and/or anticollision function)
- An integrated SIM card to upload information and events related to the crane on a web portal
- The programming of the system can also be done at the crane's base
- Display of the wind speed as well as the pre-alarm and alarm threshold on the screen

A SYSTEM COMPLYING WITH CURRENT STANDARDS

Complies with the European standard for anticollision devices EN 17076 requiring a performance level PLc as specified in the standard EN 13849-1, this system goes beyond the standard and offers a PLd performance level. It is also SIL-2 certified as per the EN 61508 standard.

These features make it compatible with the future lifting machine controllers.



WHAT ELEMENTS DOES IT INCLUDE ?



UN 61
A bypass unit to selectively activate/deactivate the functions of the system



ULM 61
A universal I/O machine interface designed to adapt to any crane type

UAF 61
An 8" graphic display for interfacing with the crane driver



AL 61
An external warning light to indicate the status of the system



UC 61
A central sensor unit to calculate and process all the DCS 61-S tasks



CDD 61 and CO 61
Absolute multi-turn encoder sensors to detect machine movements precisely



ULR 69
A radio modem for communication between devices

The DCS 61-S is a scalable product, designed to integrate progressively anticollision and zoning functions for new machines.

Its modular architecture and its advanced configuration possibilities are the assets of this new system.

These advanced capabilities enable the system to meet the various technical requirements of construction sites. This system is universal and adapts to all brands and models of cranes.

It has been designed to integrate anticollision management for different machines and now also integrates anticollision between tower cranes and concrete placing booms, as well as tower cranes and mobile cranes.

TECHNICAL FEATURES

- High safety level sensors
- A CANopen Safety communication system
- Secured sensors mounting with protection of moving parts

ANTICOLLISION DEVICE FOR MOBILE MACHINES

The DCS 61-M meets the increasing need for preventing collision risks between tower cranes and mobile cranes on a job site.



ANTICOLLISION

Our solution offers an automatic movement detection as well as the automatic control of the tower cranes in case of a possible collision. Through the GNSS localization the user obtains precise coordinates and angles of the mobile cranes' jib position.

Thus, the systems placed on the tower and mobile cranes constantly know the position of each machine thanks to the radios transferring information between the devices.

When the mobile cranes move and reposition themselves in a different place, the systems on the tower cranes register their positions and automatically create interference zones for the machines.

The device calculates in real time and in 3D the distances between each element of the cranes as well as the movement speeds to take control of the mechanisms of the cranes to ensure a slowdown, followed by a complete immobilization of the tower crane at a pre-set distance from the mobile crane.

The safety device takes automatic control of the tower crane's motion to make it slow down and stop as the hazard approaches.

The DCS 61-M gives the mobile cranes drivers driving assistance information with an intuitive graphical display of their environment (cranes in the area) as well as sound and light alarm when the hazard gets closer.



A UNIVERSAL SYSTEM

THE SYSTEM INTEGRATES THE SPECIFICITIES OF EACH BRAND AND TYPE OF CRANES AND ADAPTS ACCURATELY TO THE STRUCTURE OF THE JOB SITES

The DCS 61-S keeps its other two essential functions for maintaining productivity and site safety



ZONING

As for the classic version DCS 61-S, the system gives the user the possibility to quickly create prohibited overflight areas in 3D directly on the screen by associating geometric shapes with perimeters and static obstacles. On the mobile crane, the device emits an increasingly loud audible signal and flashes when approaching hazard.



DATA LOGGER

It continuously records and saves data related to "prohibited area" and "interference" management functions. You can view them directly on the system screen and/or download them to a flash drive.

SYSTEM INSTALLED IN THE MOBILE CRANE



SYSTEM INSTALLED IN THE TOWER CRANE



DCS 61-M

ANTICOLLISION DEVICE FOR MOBILE CRANES

AMCS Technologies offers a comprehensive solution able to manage several mobile machines whether they feature a telescopic jib (mobile crane) or a lattice boom crane (crawler) on a same site.

MAIN COMPONENTS DCS 61-M.



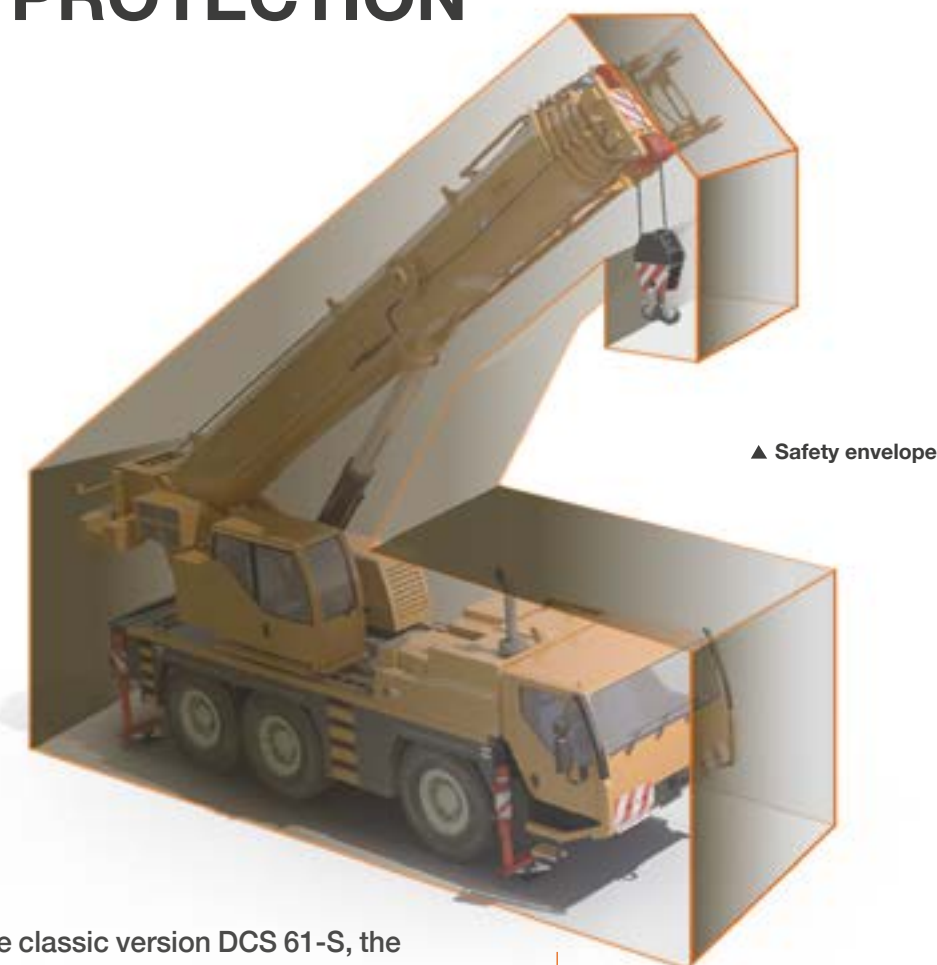
TECHNICAL FEATURES

- High safety level sensors
- A CANopen Safety communication system
- Secured sensors fixture with protection of moving parts
- GNSS multi-constellation positioning system with centimetric accuracy

WHY CHOOSE OUR SOLUTION?

- Easy installation and programming.
- This new feature adapts perfectly to immediate decision-making and as such to the daily needs of your job sites.
- Mobile cranes can work and move around freely. Our solution improves your productivity and guarantees higher safety with one single system.
- The DCS 61-S provides the crane operator with all the information he needs to operate the machine in real time, thanks to an intuitive graphical display of the environment as well as the setoff of the alarm when approaching hazard.

FULL PROTECTION



As for the classic version DCS 61-S, the system will apply a configurable safety cover around all the elements of the mobile crane.

The dimensions of this cover change according to the crane movements and the extension or retraction of its boom.



- Compatible with crawler cranes, mobile cranes and other mobile machines
- 3D anticollision management

ASK FOR YOUR OFFER




info@amcs.fr
Tel. +33 184 230 130

AMCS Technologies offers a complete solution that can manage, on the same site, several tower cranes (whether with horizontal or luffing jib) in interference with the placing booms.

TECHNICAL DESCRIPTION

- Compatible with placing boom up to 5 arms*
- 3D anticollision management (safety envelope on each arm).



-  **ZONING**
-  **ANTICOLLISION**
-  **DISPLAY AND DATA LOGGER**

The DCS 61-PB meets the increasingly frequent need to prevent the risk of collision between tower cranes and the placing booms on a construction site.

The DCS 61-PB is installed* on the placing boom and communicates with the DCS 61-S of the interfering cranes in order to manage the risks of collision in 3D (management of the height of the elements).

On the tower crane, the DCS 61-S automatically takes control of the

motions of the crane to slow down and stop the movement when approaching the placing boom (management in active mode).

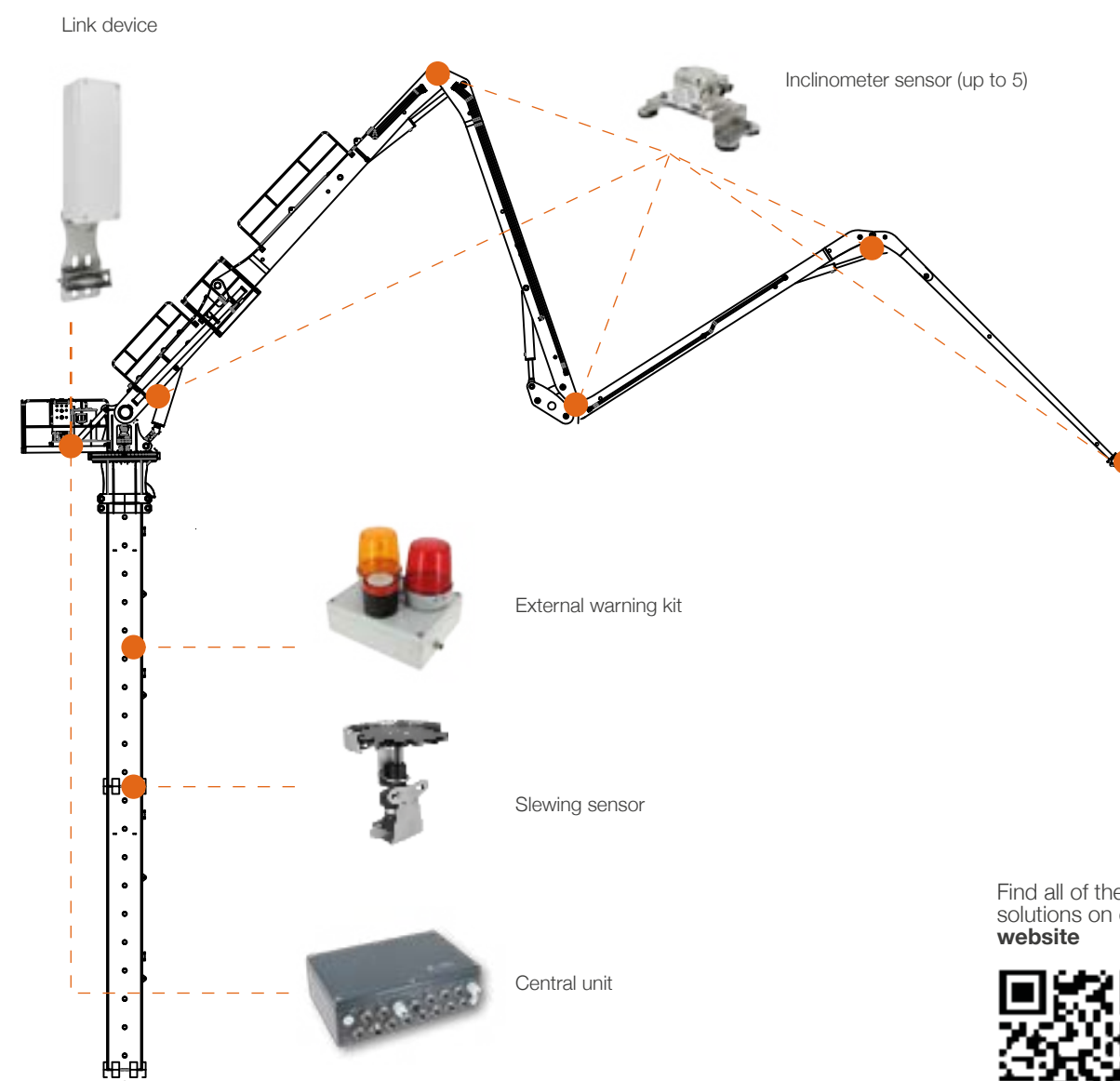
On the placing boom, the DCS 61-PB does not act directly on the controls (passive mode management). External signalling provides the operator with information in the approach zones (orange light) as well as alarms at the edge of the danger (red light and siren).

*subject to feasibility in terms of mechanical adaptations.

DCS 61-PB

ANTICOLLISION DEVICE FOR
CONCRETE PLACING BOOMS

COMPONENTS OF DCS61-PB KIT



Find all of these solutions on our website



A WEB PLATFORM

A customized solution that adapts to all your needs.

The SIM card integrated in your DCS 61-S anticollision systems will allow you to perform diagnoses on the productivity of your lifting equipment.

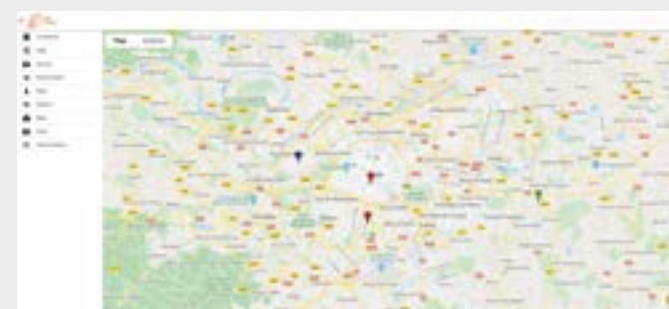
Thanks to the 3G/4G network, you will collect precise data related to each crane from various sensors from the DCS 61-S.

The main goals of IoT Lifting web and mobile application are to follow up with precision site productivity from anywhere in the world. The data will inform you of the day-to-day activity of your cranes.

WHAT CAN YOU DO WITH OUR IOT LIFTING WEB ?

Thanks to personal logins with different levels of access and functions, you will be able to :

- Perform accurate remote diagnoses
- Manage your fleet of systems (DCS 61-S, SUP 61)
- Remotely view the screens of the DCS 61-S
- Remotely view the SUP 61 site supervisors
- Download data and events related to DCS 61-S connected systems
- Generate customized statistics for each of your job sites from the data collected by DCS 61-S systems



A MOBILE APP

- Follow in real time the states (weathervane, neutralization...) of your DCS 61-S on each of your sites
- Receive notifications about the status of your devices and cranes (exceeding the wind threshold...)
- Follow in real time the values of the different sensors from your cranes (wind speed, load, lifting...) as well as the different actions performed by the system
- Thanks to advanced access rights you will be able to bypass anticollision functions and/or prohibited areas within a limited radius around the site provided the driver acknowledges the bypass



IOT LIFTING

ENSURE YOUR PRODUCTIVITY

WHAT ARE THE ADVANTAGES OF OUR IOT LIFTING SOLUTION ?

- Accurate and remote monitoring of the productivity of your job sites and cranes
- A customizable offer according to your needs
- Our network covers the whole globe, IoT Lifting is available worldwide
- Manage your fleet of AMCS technologies products



**ASK FOR
YOUR OFFER**

info@amcs.fr
Tel. +33 184 230 130

MONITOR ACTIVITY ON YOUR SITE CONTINUOUSLY IN REAL TIME

The new supervisor model, SUP 61, is a tool used to monitor on a single screen and save data from cranes on your site fitted with the DCS 61-S systems.



OPTIMUM SUPERVISION TOOL

Thanks to the radio link with the site's anticollision network, the SUP 61 communicates in real time to the user all the information about the position, movements and events of the cranes.

Whatever the surface area and complexity of the site, its performance and user-friendliness let you track the activity on your site.

Either from your office on-site or from the other side of the world, you can :

- Access to information about the slewing, distribution, hook height, load, position of the crane on the travelling railway, weathervane mode and bypass for each crane on your site
- Consult the data logs of each machine and download them onto a flash drive
- If necessary, take actions to manage interferences and overflight restrictions. Selective bypass for one or more zones can be carried out remotely
- View and save wind speed
- Have access to the supervisor from one or more workstations on the internal network

It includes :

A screen, a keyboard, a mouse, and a central unit with a radio interface.



MAIN ADVANTAGES ?

- Supervision of the site and the status of the anticollision systems of all equipped cranes in real time
- Remote diagnosis for immediate action
- Constant remote monitoring of site productivity



DIGITAL HIGH DEFINITION

- Optical zoom x36
- Digital zoom x16
- Day/night vision icr filter
- Autofocus
- Image stabilizer

SCREEN



MANAGE + 60 WIRELESS CAMERA ON THE SAME SITE

- Rugged design
- Touch-screen
- High brightness
- SD card recording

PEDAL CONTROL



HANDS-FREE CONTROL DEVICE

- Zoom control
- Switching view from a camera to another
- Bluetooth connection

MORE OPTIONS :

- Continuous recording for 7 days or more
- Live access to the cameras remotely

The anemometer fulfils the need to control and monitor job site wind speed to prevent any risks related to loads handling.

We offer a **complete solution** ranging from simple alarm notifications to data recording and downloading.

WHAT DOES ANEM 200 DO ?

It checks wind speeds up to 200 km/h (other units available: mph or m/s)

ITS SCREEN

IN THE CAB DISPLAYS :



IT IS EQUIPPED WITH A SD CARD

The ANEM 200 records the activity log, pre-alarm and alarm threshold oversteps.

> OPTIONS

A very bright giant display, the AFG 61, can be installed externally with a link via radio or cable. This improves quick decision-making and job site safety



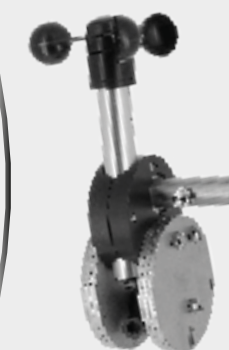
AFG 61

- Line of 10 alphanumeric characters: 14 cm
- Amber LEDs (1400 mCd) with a visibility of over: 100 m
- Choice of display units: km/h, mph or m/s

> WHAT ELEMENTS ARE INCLUDED IN THE ANEM 200 KIT ?



ANEM 200



- Anemometer sensor
- External audible alarm
- Power pack
- **Wired or radio connection**



TECHNICAL FEATURES

- Aluminium body able to withstand extreme outdoor conditions
- Very sturdy sensor available either in fixed or pendular version
- Universal fastening. All the elements in the kit are fitted with magnetic studs to facilitate installation of the product on all types of mountings
- Withstands temperatures ranging from -20°C to +70°C
- IP65 dust & waterproofness

AIRCRAFT WARNING LIGHTS

BE VISIBLE



AMCS technologies offers various daytime and night-time aircraft warning lights to satisfy all your requirements and ensure the visibility of your cranes.

BAN4 NIGHT-TIME AIRCRAFT WARNING LIGHTS

Designed for night-time aircraft warning lights, our low-intensity Type B warning light (32 Cd) uses LED technology and is ICAO approved.

MAIN BENEFITS:

- A compact design facilitating installation
- IP 66 proofness and excellent resistance to vibrations
- Long lifetime (100,000 hours)
- Low energy consumption (<6W)
- Each emergency cabinet provides 20 hours of autonomy in case of a network power outage
(Possibility to connect up to 3 cabinets via a quick connection)

BAN4 NIGHT-TIME

The kit contains :



- 3 or 4 low-intensity type B warning lights with mounts
- 1 BAN4 emergency cabinet

DAYTIME AND NIGHT-TIME AIRCRAFT WARNING LIGHTS

Our medium and high intensity aircraft warning lights are available in several versions :

- Type A white flash, designed for use as daytime warning lights (20,000 Cd) and night-time warning lights (2000 Cd)
- Type B red flash, designed for use as night-time warning lights (2000 Cd)
- Type C steady red, designed for use as night-time warning lights (2000 Cd)
- Type AB red and white flash, designed for use as daytime warning lights (20,000 Cd) and night-time warning lights (2000 Cd)

THE DAYTIME WARNING LIGHT

Complementarity with
the BAN4 night-time



NUMEROUS BENEFITS :

- Compact design facilitating installation
- Self-test cycle
- Our aircraft warning lights are ICAO-approved
- LED technology
- Long lifetime (100,000 hours)
- Low consumption
- The light-sensitive switch and dry contact can be either incorporated into the light or fitted remotely in a control system

A WIDE RANGE OF SERVICES

CUSTOMIZED MANAGEMENT OF CUSTOMER EQUIPMENT

Your systems can be listed in our database to guarantee personalized maintenance and follow-up.

SALE AND RENTAL

Our products are available for purchase and rental.

TRAINING AND ADVICE

2 day training sessions are provided at our/your premises.

R&D

Specific development for projects.

TROUBLESHOOTING AND REPAIR

Repair and maintenance of products on site or in our workshops.

TECHNICAL SUPPORT

Technical studies, Project management, Site monitoring.



A WORLDWIDE NETWORK OF CERTIFIED INSTALLERS

Resulting from a constant mobilization of its employees and its dealers, the international development of AMCS technologies is based on :

- ● ● ● A knowledge of the expectations of its customers and the ability to find concrete and effective answers
- ● ● ● Historical and quality relationships with the world's major construction companies
- ● ● ● Partnerships with the world's leading crane manufacturers
- ● ● ● A strengthened international dynamism thanks to close collaboration with the biggest players in the world of lifting

Find all of these
solutions on our
website



THE SERENITY OF WORKING WITH THE REFERENCE IN THE ANTICOLLISION MARKET

Possibility to develop customized products to meet the specific requirements of construction sites and lifting material.

Teams available on the 5 continents and ready to intervene at any time.

A worldwide dealers network.

Collaboration with the leading construction companies, and lifting equipment manufacturers and dealers.