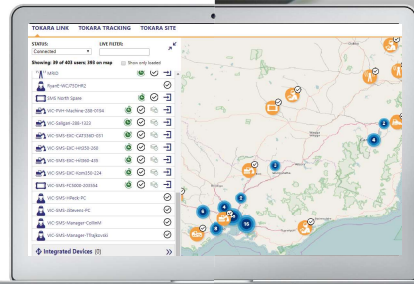




POWERED BY

**Aptella**  
AUTOMATION +  
POSITIONING TECH

Tokara is the industry-leading remote access solution to manage everyone working to a design on site. Designed for project managers, surveyors, contractors and foremen, Tokara saves time and keeps everyone working to the right design at the click of a mouse.



### Remote Access

- > Connects to leading brands of positioning technology
- > Location & connection status design file management



### Visualisation

- > See your project evolve with linework and drone imagery map overlays
- > Quickly view and connect to field crew devices



> SOLUTION READY

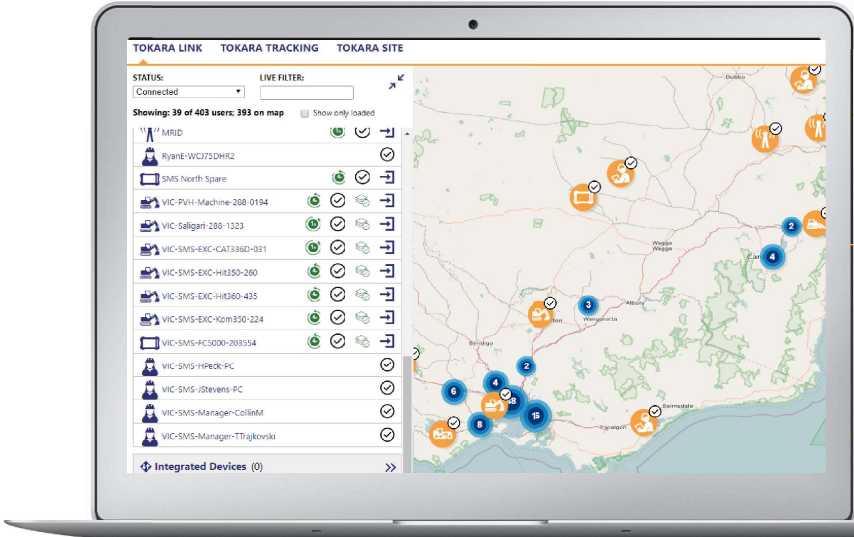
aptella.com



# Realtime Locations

## User list

- Advanced filters
- Icon indicators for status and type
- Panel hide for full screen map view once filter is set



### Managed RTK Bases

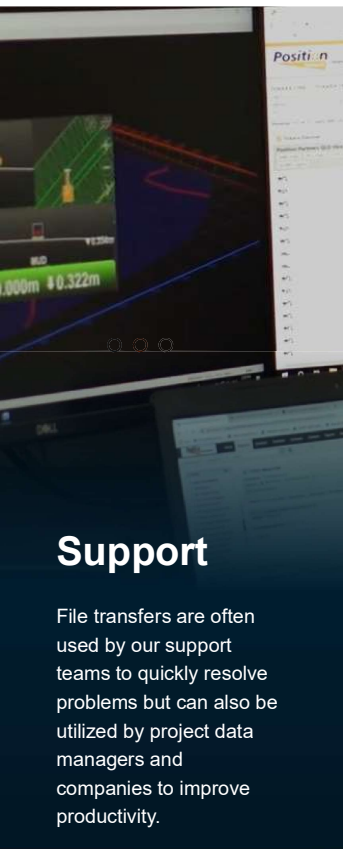
Base station location of owned and used RTK infrastructure

### Multiple assets

Blue numbers indicate the location of multiple assets in close proximity. Zooming in will explode the positions.

### User Types

Icons clearly identify the user type for immediate asset recognition



## Support

File transfers are often used by our support teams to quickly resolve problems but can also be utilized by project data managers and companies to improve productivity.

## File Transfers

Manual and automated file transfers provide the ability to resolve support requests quickly and reliably.

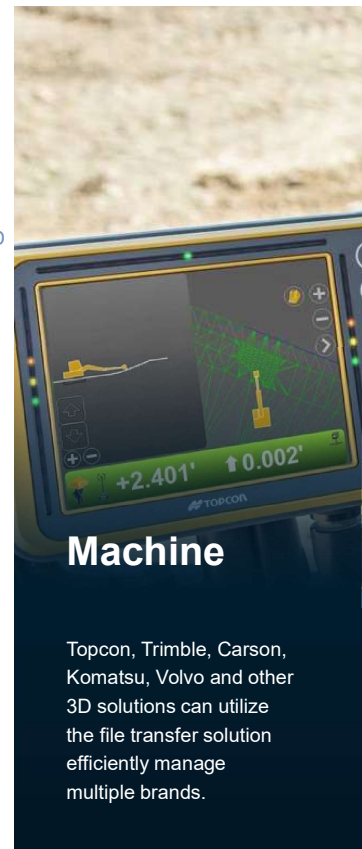
## To Machine

Frequency files, localisations, firmware, software, design updates are all facilitated with the secure transferring of data to the machine 3D system



## From Machine

Saving files from the machine before critical updates or systems resets allows for the immediate restoration of all settings and machine calibrations for instant productivity

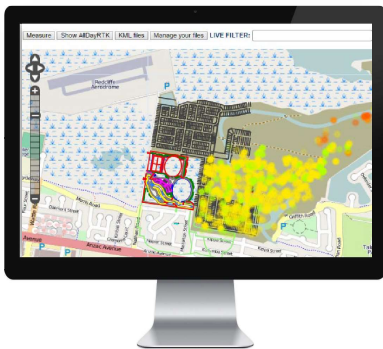


## Machine

Topcon, Trimble, Carson, Komatsu, Volvo and other 3D solutions can utilize the file transfer solution efficiently manage multiple brands.

# RTK Correction Strength Mapping

UHF and Network corrections are still on of the most common causes for loss of productivity on a 3D construction site. Having the tools to mitigate poor GPS system design and network coverage can dramatically improve the 3D machine control outcomes.



**UHF** Using a UHF radio survey kit from Position Partners, the UHF signal strength, position and quality can all be mapped across a site.

As one of the largest support issues on a site, knowing what the coverage is can offer significant value in supporting 3D system on site.

**CELLULAR** Using Tokara enabled devices the coverage quality of the Telstra network is automatically and accurately mapped across a project site to show localized coverage for planning and support.

Where Greenfield sites are being planned Telstra coverage maps can be used to provide an indication of expected coverage prior to a Tokara survey



# Tokara Benefits

— ..

## Project Manager

- Macro design file management
- Overall project productivity
- Resources management

## Contractor

- Equipment utilisation
- Locations and tracking
- Support reporting

## Operator

- Confidence in design files
- On demand support
- Safely operate

## Foreman

- Latest design files
- On demand support

## Surveyor

- Revision control
- Site setups
- Position quality
- Machine management



# All Day RTK

Enabling Geo-Precision

POWERED BY

**Aptella**  
AUTOMATION +  
POSITIONING TECH



AllDayRTK records and distributes GNSS position correction information using a network of Continuously Operating Reference Stations (CORS). AllDayRTK is purpose-built to meet the rigour and quality required for the demanding tasks of all geospatial applications and civil infrastructure projects across Australia and New Zealand.



## Australia Wide

AllDayRTK  
AllDayRTK PLUS  
AllDayRTK RINEX



## Products

AllDayRTK SITE  
AllDayRTK FOCUS



## User Control

**MiRTK**



➤ SOLUTION READY

[aptella.com](http://aptella.com)



# Multiple brand support



# Excavator Solutions

MC-i4 / MC-R3

MC-Max

MC-Mobile





# MC-Max Excavator – GNSS – Auto and indicate



- > Accuracy (Tolerance): +/- 20mm – **General Earthworks Solution**
- > Requires clear view of the sky, free from obstructions (buildings, trees, excavations) to track satellites
- > Requires a correction to be received from a base station via Radio or Network (this enables the system to obtain 20mm precision)

# MC-Max Excavator – LPS



- > Accuracy (Tolerance): +/- 1-3mm – Final Trim Solution
- > Requires line of sight to the total station & recommended working range up to 150m from the instrument
- > 1 Total Station per machine and no direct view to the sky needed for operation

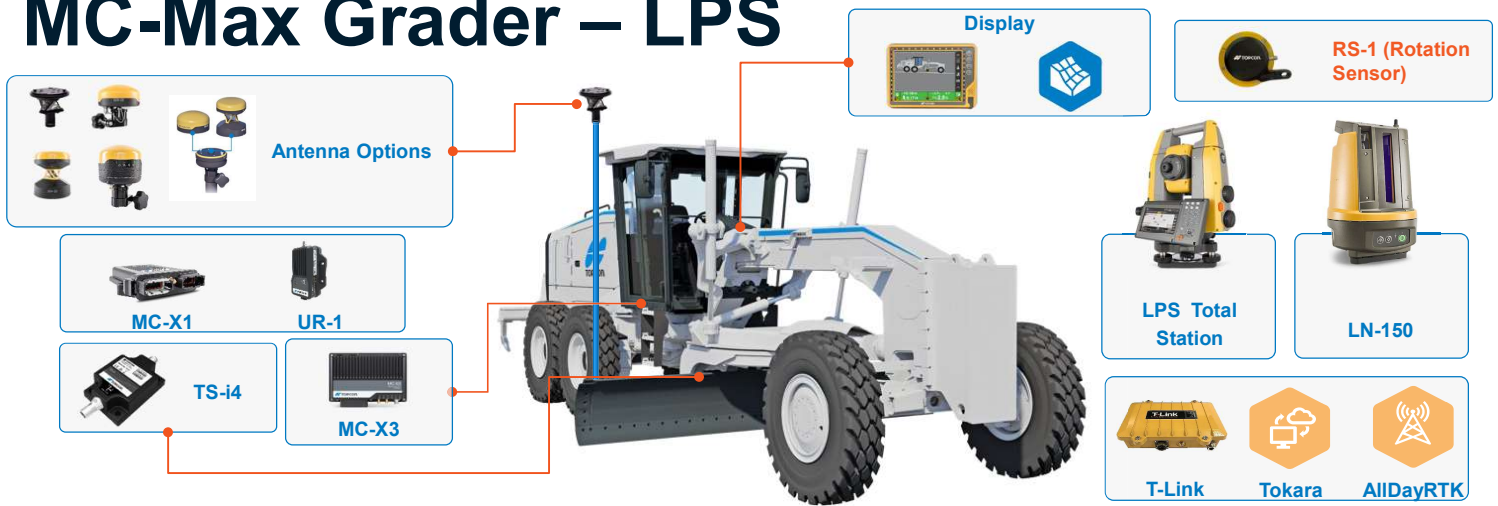


# MC-Max Grader – GNSS Single/Dual



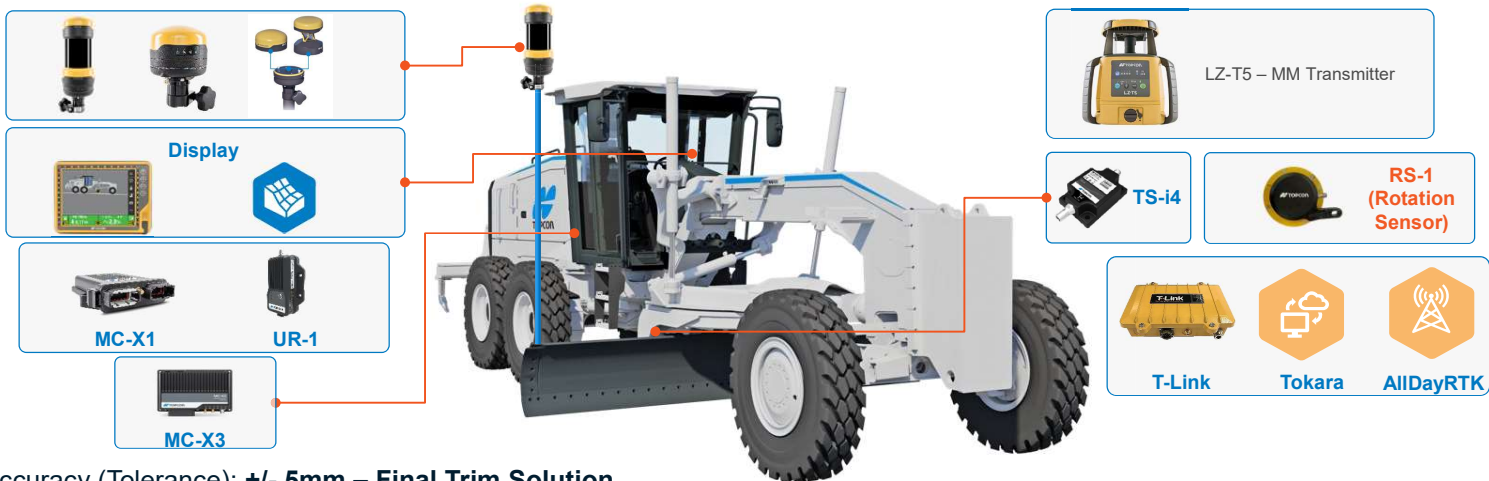
- > Accuracy (Tolerance): +/- 20mm – **General Earthworks Solution**
- > Requires clear view of the sky, free from obstructions (buildings, trees, excavations) to track satellites
- > Requires a correction to be received from a base station via Radio or Network (this enables the system to obtain 20mm precision)
- > This system allows the operator to roll the blade +/-15° when trimming (help manage material movement and placement)

# MC-Max Grader – LPS



- Accuracy (Tolerance): +/- 1-3mm – Final Trim Solution
- Requires line of sight to the total station & recommended working range up to 150m from the instrument
- 1 Total Station per machine and no direct view to the sky needed for operation
- This system allows the operator to roll the blade +/-15° when trimming (help manage material movement and placement)

# MC-Max Grader – Millimeter GPS



- Accuracy (Tolerance): +/- 5mm – Final Trim Solution
- Requires line of sight to laser transmitter & recommended working range up to 120m from the instrument
- Multiple machines can run off 1 laser transmitter. Up to 4 lasers can be joined to cover 960m of working area
- Requires clear view of the sky, free from obstructions (buildings, trees, excavations) to track satellites
- Requires a correction to be received from a base station via Radio or Network (this enables the system to obtain 20mm precision)

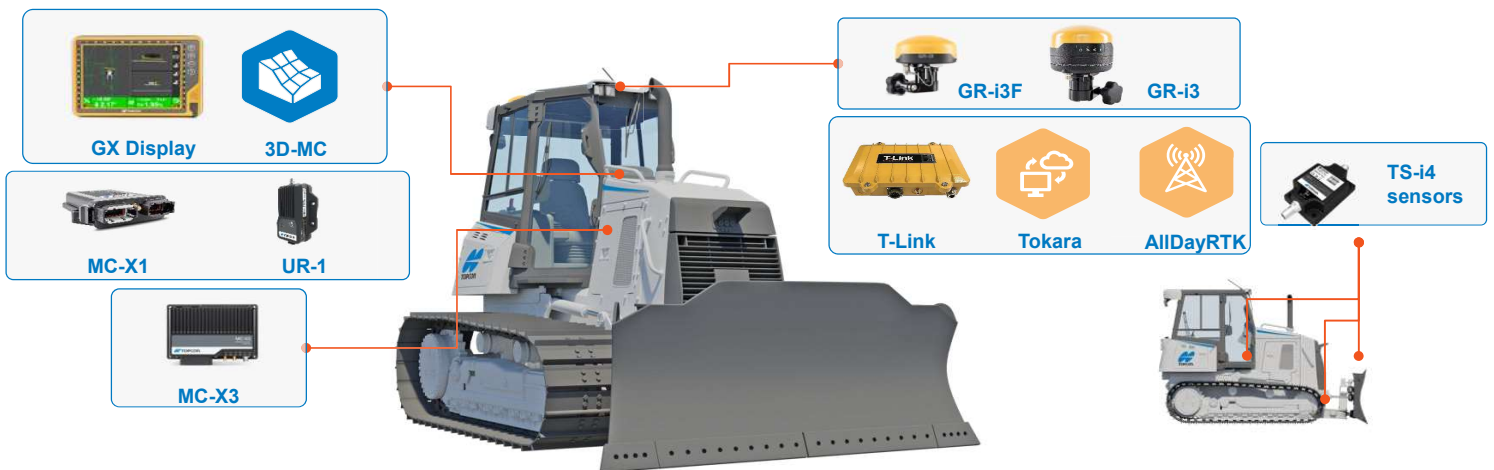
# Dozer Solutions

MC-i4 / MC-R3

MC-Max



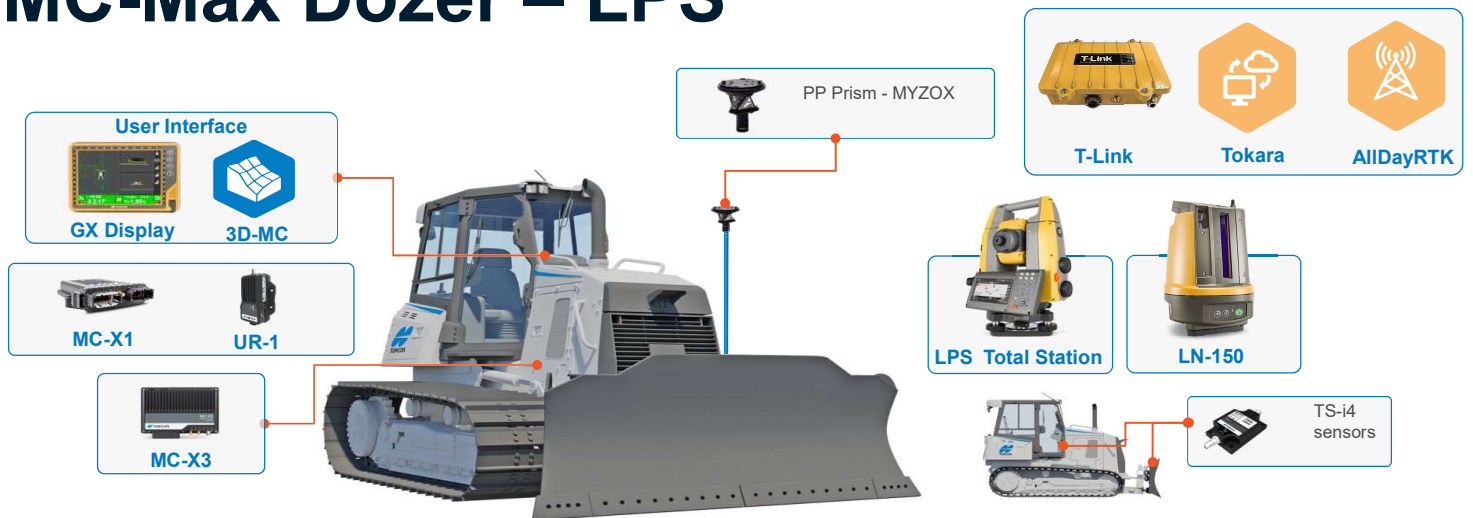
# MC-Max Dozer – Mastless, GNSS



- > Accuracy (Tolerance): +/- 20mm – General Earthworks Solution
- > Requires clear view of the sky, free from obstructions (buildings, trees, excavations) to track satellites
- > Requires a correction to be received from a base station via Radio or Network (this enables the system to obtain 20mm precision)



# MC-Max Dozer – LPS



- > Accuracy (Tolerance): +/- 1-3mm – Final Trim Solution
- > Requires line of sight to the total station & recommended working range up to 150m from the instrument
- > 1 Total Station per machine and no direct view to the sky needed for operation

# Supporting Systems

## Total Stations

High accuracy optical positioning

- > Accuracy (Tolerance): +/- 1-2mm
- > Requires line of sight to the total station from the prism pole
- > Solution for high precision grade & position checking



## Survey Software Solutions

Design software to view and adjust project data

- > 3D Office
- > MAGNET Office



## GNSS Rover

Grade checking solution that allows you to measure and verify project data

- > Accuracy (Tolerance): +/- 20mm
- > Requires clear view of the sky, free from obstructions (buildings, trees, excavations) to track satellites
- > Setup as a Network Rover or UHF Base/Rover Solution





# Weighing Solutions

## Why Weigh?

### Up Productivity

- Streamline loading
- Fewer vehicle movements
- Certified “legal for trade” – no weigh bridge required



### Minimise Losses

- Only loading what is required
- Full ability to account for products used

### Improve Fleet Management

- Less wear and tear on vehicles
- Increased safety of not overloading
- Reduced maintenance costs

# What can we fit systems to?





Quarrying



Recycling



Mining



Builder's Merchants



Forestry



Municipal



Ports



Logistics



# Compact Loaders



## Loadlog 300+



- Entry level dual hydraulic pressure sensor weighing system
- For loaders with a single attachment
- Printer option
- Check weighing incoming and outgoing goods



## Weighlog a10



- 4.3" colour touchscreen
- Twin hydraulic pressure sensor weighing system
- Printer option
- Communication via SD card and USB memory stick
- Stores database
- Truck & trailer loading and batch blending

# Medium – Large Loaders



## Loadmaster α50

- Colour touch screen display
- Target load entry
- Printer option
- Slope compensation
- Vehicle loading applications eradicating return trips to stockpile



## Loadmaster α100

- New dynamic weighing technology using inclinometers
- SQL database functionality. XML data output via serial, Ethernet & USB
- 4G and Wi-Fi connectivity
- Data management applications
- Legal for Trade (Y(b)) MID



# Excavators



## Loadex 100

- Cost effective maximising tons per hour performance
- Load correctly first time eradicating return trips to stockpile
- Colour touch screen display
- New dynamic weighing technology using inclinometers
- SQL database functionality. XML data output via serial, Ethernet & USB
- 4G and Wi-Fi connectivity





# Material Handlers



## Loadmaster $\alpha$ 200

- Weighing at any point in the lift range of the machine
- Advanced movement compensation
- Simple installation and calibration
- CAN based system
- High precision, machine specific load cell
- Various weighing modes: Dynamic or Constantly Live Static
- “Pause loading” feature during breaks
- Camera input capability
- Overload alarm
- SQL database functionality. XML data output via serial, Ethernet & USB
- 4G and Wi-Fi connectivity

BLIND  
SIGHT



# THE NEW STANDARD IN SAFETY

Stop accidents | automate safety reporting  
Video of every detection | lead safety metrics



Presien

# Highly mobile machines with significantly obscured rear vision



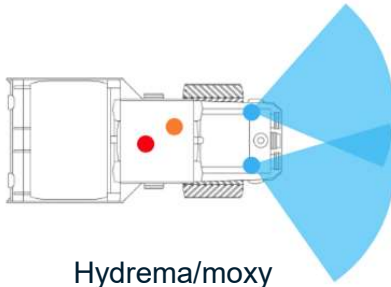
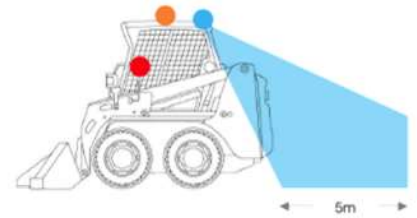
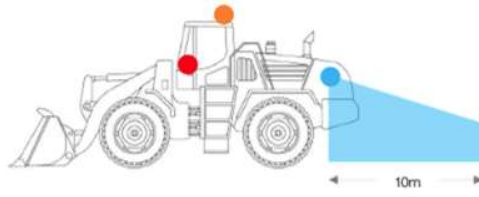
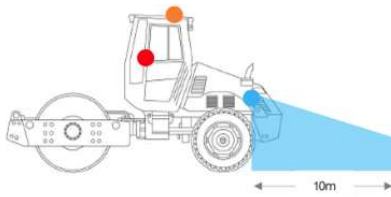
BPU



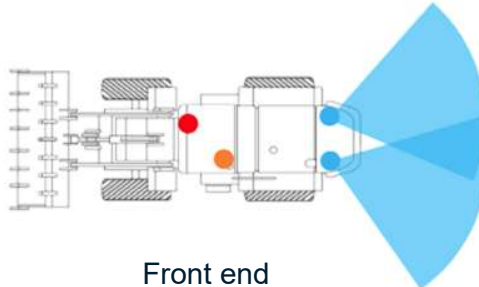
Sensor



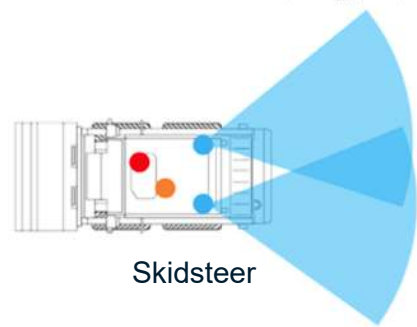
In-cab alert



Hydrema/moxy

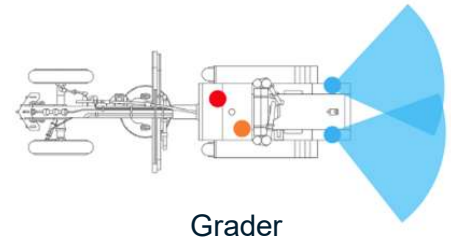
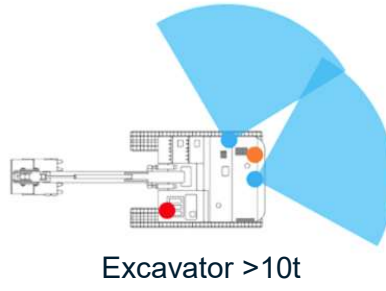
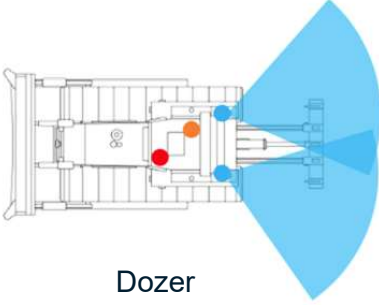
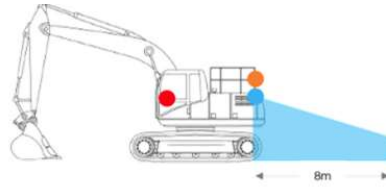
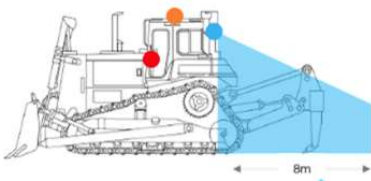
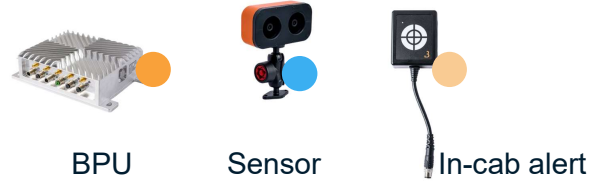


Front end loader

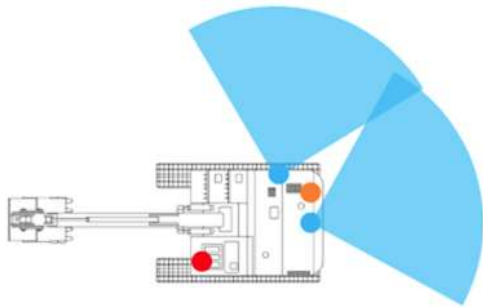
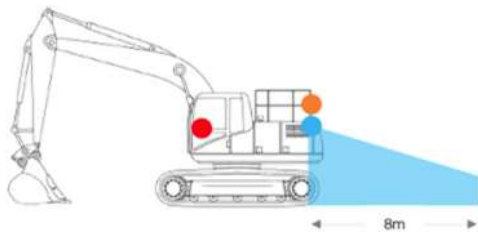


Skidsteer

# People entering rear hazard zones



# People entering rear hazard zones



Excavator >10t



BPU



Sensor



In-cab alert

