

AGCbox

Combining **autonomy** and **safety**



Positioning



Navigation



Safencing ©



Security



Monitoring &
Teleoperation

Positioning

Receiver type	Multi-frequency GNSS receiver (with integrated antenna) and integrity monitoring
Constellation and frequencies	E5a, E5b L2C f02, E6, E2, L1, f01 - GPS, Galileo, Glonass, Beidou
Measure rate	10 Hz
IMU	50Hz (6 axes: Accelerometer, gyroscope)

Accuracy

Heading	Up to 0.2° accuracy
Pitch/roll	Static: 0.5°, dynamic: 0.8°
Positioning- RTK fix	8mm + 1 ppm (67%) 15mm + 2ppm (95%)
Velocity accuracy	+/- 0.02m/sec

Guidance

Controller	ARM Cortex-M4 (180MHz) 512kB Flash, 200kB RAM FreeRTOS
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Mission Control

Operating system	Linux kernel (Yocto) ARM Cortex-A53 quad-core (1.5GHz) 1MB L2 Cache
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Connectivity

Wi-Fi	802.11b/g/n 2.4 GHz
Safencing/Implement control/Diag Machine guidance / Positioning	2 bus CAN 2.0b up to 8Mb/s 1 bus CAN 2.0b FD capable. LTE Cat.1 and LTE Cat.M1. Europe and Asia, Option: Worldwide, Japan, Latin America, North America, India
Modem	2G and pro 3G backup
SIM cards	Embedded MFF2 and additional sim slot
LoRa (optional)	869/911MHz 2.4 GHz
Wire	3 dry contacts reading/control
Web UI	View status and logs, firmware update, working mode setup, log download

Data & Storage

Data protocol	CANopen and Safe AGC CAN
Internal storage	4GB LPDDR4 16GB eMMC

Physical

Dimensions	180*180*102 mm
Weight	1.3 kg
Fixing system	Standard 5/8-11 thread and location pin or 3 screws M6
External indicator	2 LEDs
Connector	19 pins, connector with a case lock
Safety Relays	2 (1 output)
Input voltage	9-16 Vdc - ISO 15003

Environmental specifications

Water and dustproof	IP67
Operating temperature	-20°C to +70°C
Storage temperature	-40°C to +85°C
Vibration	60068264 and 6006826 (random vibrations) 60068-2-6 (Sinusoid vibration)

Planned Certifications

CEM	NF EN ISO 14982
RED	2014/53/UE
RoHS	2011/65/UE
ISO 13849 - PLC	Safencing©

