





## REMOTE MONITORING

**ACTIVATION** The Orchestra device can be remotely activated and configured by users at the time they require specific monitoring services.

**DIAGNOSIS** All messages available on can-bus together with I/O streams are read, analyzed, integrated and transferred from the Orchestra device to the cloud to generate information on specific HMI available for remote and in proximity use.

**CONTROL** All the operational variables are tracked, both for diagnostics and proper use of the machines, recorded on the black box or sent to cloud per user's request.

## COMMUNICATION

**GSM** QUAD BAND GSM/GPRS MODULE, WORLD WIDE COVERAGE, LOW CONSUMPTION IN STAND-BY MODE, AUDIO INTERFACE (MICROPHONE+SPEAKERS) - EASY REPLECEABLE SIM

**WI-FI** IEEE802.11 B,G,N INTERFACE

**INTERFACES** NFC, IBUTTON, STRAIN GAUGE

## VEHICLE INTEGRATION

**CAN** 2 CAN INPUT 2.0 A/B, REMOTE PARAMETERS DYNAMIC CHANGE, REMOTE RE-FIRMWARE

**INPUT/OUTPUT** 8. ANALOG INPUT (STRAIN GAUGE / PT100) / DIGITAL, 4 PWM 2A EACH, 4 RELAY CLEAN CONTACT 3A

## GEOLOCALIZATION

**GPS** L1 COMPLIANT GPS FREQUENCIES, WORLD WIDE COVERAGE, INTERNAL/EXTERNAL ANTENNA, GNSS

## OTHER INTERFACES

**OTHER INTERFACES** USB OTG, RS232, ES232/ES485

## SENSORS

**ACCELEROMETER** THREE AXELS ACCELEROMETERS

## TECHNICAL DETAILS

**PROCESSOR** FREESCALE CORTEX M4 125 MHz - 1MB FLASH MEMORY

**BATTERY** RTC WITH BACKUP BATTERY

**MEMORY** 1+8 Gb FLASH MEMORY, SD SLOT UP TO 32GB, DYNAMIC MEMORY ALLOCATION (BLACK BOX, LOCAL ANALYSIS TRANSFER BUFFER)

**STATUS LED** DATA TRANSMISSION AND DEVICE STATUS

**PROGRAM INTERFACES** C++ , CODESYS COMPATIBLE

## STANDARD COMPLIANCE

**IP** IP67 – IP54 WITH GSM CARD – CASE IN WATERPROOF RESIN

**EMC** EMC, R&TTE

## COMMUNICATION PROTOCOLS

**PROTOCOLS** CANOPEN, J1939, FMS, ISOBUS

## CUSTOM DESIGN

Design & deployment of hardware and firmware products based on customer specs, to develop SMART PRODUCT

