

# Ares III+ Control Box



## ARES III+ CONTROL BOX

Ares control unit is the unit section where warning, detection and fault status of the system which is designed and developed by Nero Industry completely as a completely domestic product, by power leds belonging to each cylinder and detector. Ares Control unit which operates flexibly, complying with system configurations and operating logic, controls fire extinguishing and fire suppression system. This smart control unit which has a many-chambered compact structure, receives the detection signals for power group, body, tire, engine, crew and other compartments to be protected and activates the system.

By means of smart control unit, system verifications and logical operations could be performed. It has features of built-in-test, manual activation and automatic activation. It has water and dust protection at IP 67 level. Error, alarm and other data regarding fire suppression and fire extinguishing system are transmitted to vehicle main computer by CANBUS communication infrastructure.

### TECHNICAL SPECIFICATIONS

• High speed reaction in a time period less than 6 milliseconds
• Automatic and manual built-in-test opportunity(BIT)
• Accepts input signals from optical detectors, thermocouples and thermal wire
• Automatic-manual activation
• Manual activation and output signal for each compartment
• Fault indication for each cylinder and detector on vehicle diagram
• Alarm LEDs for every compartment
• Alarm logging until next reset
• Recording fire detections, manual activations and error conditions
• The last 500 datalog entries can be reached
• MTBF duration of 140,000 hours
• Galvanically isolated
• Power supply: 24 VDC nominal (16-32V)
• Power consumption: 450 mA @ 24 VDC
• Weight: 2240 gr ± 100 gr (Depends on configuration)
• Dimensions (WXLXH) :180 x 86 x 149 mm ( 5 mm)
• Produced as per PCB IPC A-610 class-3
• IP67 water and dust ingress protection
• Salt fog test resistance 800 hours
• MIL-STD-810H ,MIL-STD-461G, MIL-STD certifications, 1275E UL, conforming to CE GOST-R standard

## UNIT CONTROL CAPABILITIES

12 Detector ( Programmable Function)
12 Cylinders( Crew (4) Engine (2) Tires (2) Body (4) )
Double Shot Feature( Crew and Engine )
While manual buttons provide activation, data could be recorded by CANBUS independant from electronic system.
DC/DC Isolation

Manual Body Activation
Manual Tires Activation
Manual Engine Activation
Manual Crew Activation
Blackout Mode
Built In Test Equipment(BIT)
Combat / Peace Mode Selection

4 Inputs:	4 Output (1A 24V DC):
-Input 1 : Vehicle ignition switch ( 'NO' contact, switching to battery (+))	-Output 1 : Main warning ( 1A @ 24VDC )
-Input 2 : Blackout input ( 'NO' contact, switching to battery (-) )	-Output 2 : Crew fire alarm ( 1A @ 24VDC )
-Input 3 : Emergency input ( 'NO' contact, switching to battery (-) )	-Output 3 : Engine fire alarm ( 1A @ 24VDC )
-Input 4 : Configurable digital inputs ( 'NO' contact, switching to battery (-) )	-Output 4 : Crew fan controller ( 1A @ 24VDC )

