



TECHNICAL SPECIFICATIONS

Title:	Vehicle Verification Unit (VLF & TMM) (4)	
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1 Purpose of document

The purpose of this document is to outline and demonstrate the technical specifications of the Vehicle Verification Unit (VLF & TMM) (4).

2 Revision Control

Revision Date	Revision Number	Comments

Table 1: Revision Control Table

3 Definitions

Abbreviation	Definition
BHU	Booyco Host Unit
°C	Degrees Celsius
CAN	Controller Area Network
CXS	Collision Avoidance Systems
h	hour
Hz	Hertz
IEC	International Electrotechnical Commission
IP	Ingress Protection
Low Frequency	Low Frequency
m	metre(s)
NFC	Near Field Communication
RF	Radio Frequency
TMM	Trackless Mobile Machine
VAC	Voltage Alternating Current
VDC	Voltage Direct Current
VLF	Very Low Frequency
W	watt(s)
Wi-Fi	Wireless Fidelity

Table 2: Definition Table

4 Vehicle Verification Unit (VLF & TMM) (4) Specifications

4.1 Overview

The Booyco Vehicle Verification Unit (VLF & TMM) (4) is crucial in verifying and maintaining that CXS systems are operational before/while in a working zone. The unit only works in conjunction with CXS products. The Vehicle Verification Unit (VLF & TMM) (4) is designed to verify the functionality or operational detection of a vehicle's LF sensors.



Figure 1: Vehicle Verification Unit (VLF & TMM) (4)

Specification	Value
Battery Capacity	7Ah
Battery Voltage	13.7 V
BHU LF Frequency	125 kHz
BHU NFC Frequency	13.56 MHz
BHU RF Frequency	868 MHz (Local) 915 MHz (International)
BHU Wi-Fi Frequency	2.4 GHz
Colour	Grey (RAL 7035)
Dimensions	530 mm × 430 mm × 200 mm
Fire resistance	960 °C conforming to IEC 62208
Ingress Protection	IP66
Material	Polyester reinforced with fibreglass
Operating Power	51.38 W
Operating Temperature	-40°C ~ 80°C
Operating Voltage	VAC : 88 ~ 264 (@ 47Hz~63Hz) VDC : 124 ~ 370
Pedestrian Sensor LF	125 kHz

Pedestrian Sensor NFC Frequency	13.56 MHz
Pedestrian Sensor Port	CAN BUS 2
Pedestrian Sensor RF Frequency	868 MHz (Local) 915 MHz (International)
TMM Sensor NFC Frequency	13.56 MHz
TMM Sensor Operating Frequency	4 GHz on a Bandwidth of 499MHz
TMM Sensor Port	CAN BUS 1

Table 3: Vehicle Verification Unit (VLF & TMM) (4) Specifications

5 Drawing of Vehicle Verification Unit (VLF & TMM) (4)

5.1 Dimensional Drawing of Vehicle Verification Unit (VLF & TMM) (4)

The below figure illustrates the dimensional drawing of the Vehicle Verification Unit (VLF & TMM) (4).

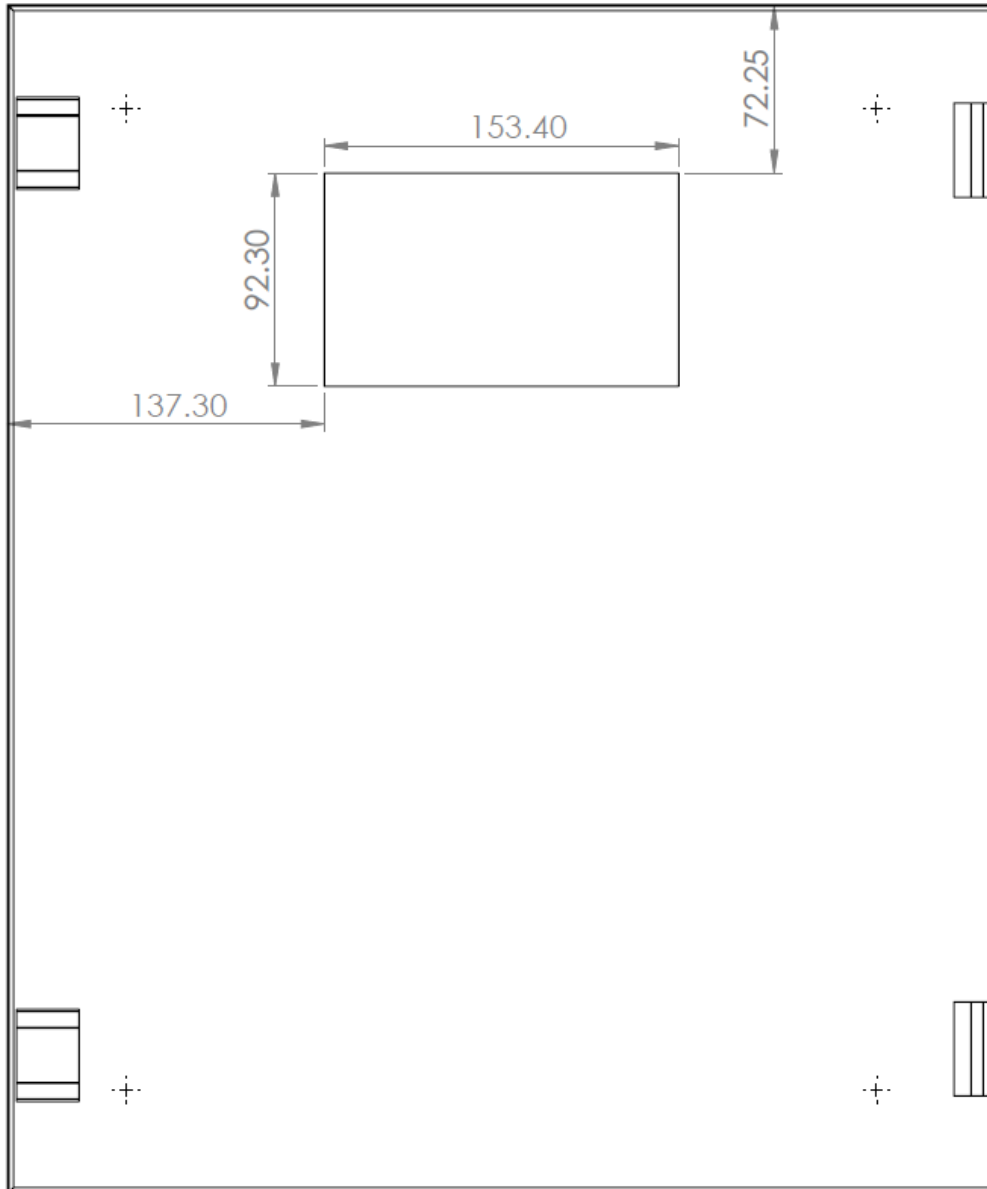


Figure 2: Dimensional Drawing of Vehicle Verification Unit (VLF & TMM) (4) Window Specification

Parameter	Specification
Distance from Left	137.3 mm
Distance from Top	72.25 mm
Height	92.3 mm
Width	153.4 mm

Table 4: Enclosure 530x430x200 Simple Window Dimensions

5.2 Dimensional Drawing of Vehicle Verification Unit (VLF & TMM) (4)

The below figure shows the dimensions of the enclosure with respect to the outside of it.

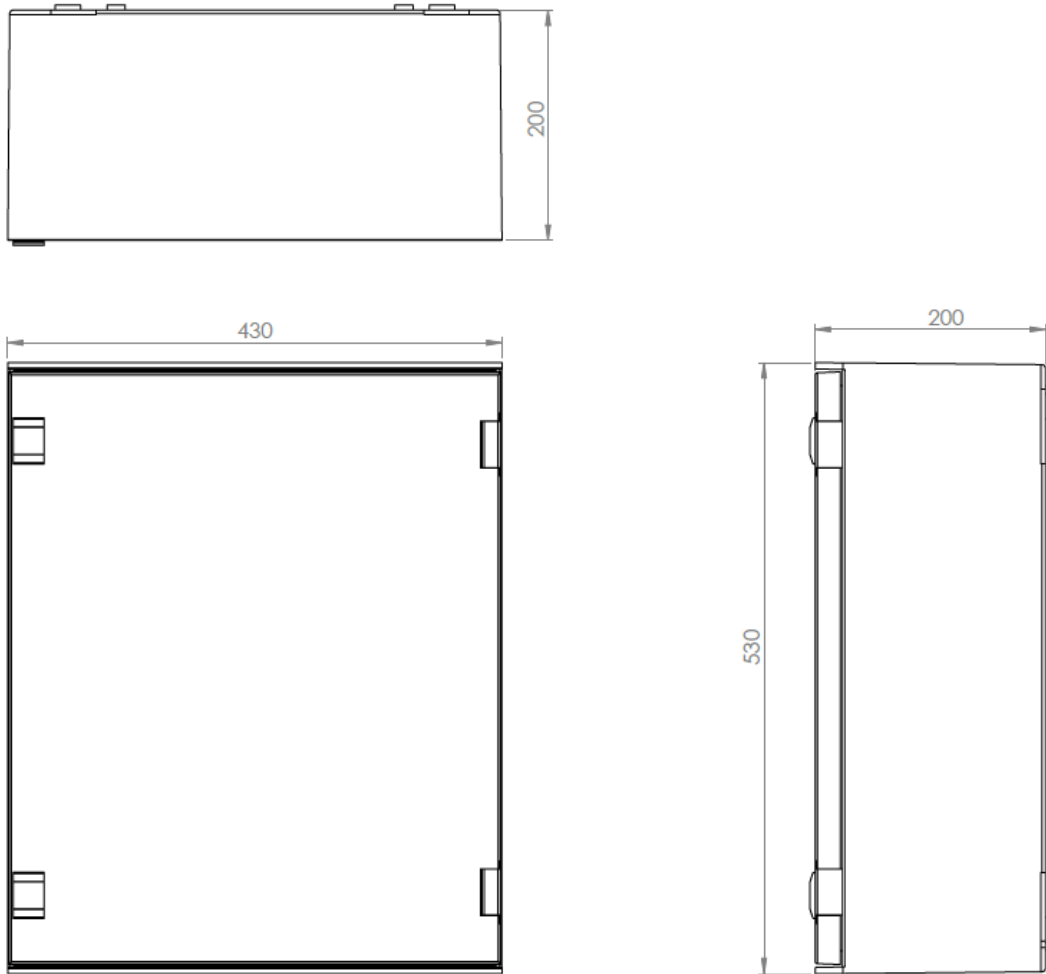


Figure 3: Dimensional Drawing of Enclosure

Parameter	Specification
Height	530 mm
Length	200 mm
Width	430 mm

Table 5: Vehicle Verification Unit (VLF & TMM) (4) Simple Dimensions