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## CKAS VersaFRM



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### Introduction

The CKAS VersaFRM is a low cost efficient 2 degree of freedom (2DOF) simulation platform targeted at simulator builders who are seeking to quickly develop **an entry to medium fidelity motion simulator** of any kind for up to 2 people. The VersaFRM comes with a choice of two different payload motion systems and can be turned into a motion simulator very quickly with little addition of parts from the simulator builder.

### Target Applications

- **Medium Scale Low Cost Entry Level Flight Training Simulators for up to 2 people**
- **Medium Scale Commercial Vehicle and Truck Driver Training Simulators**
- **Medium Scale Mining Equipment Simulators and Heavy Earth Moving Equipment Simulators**
- **Medium Scale Train Driver Simulators**
- **Medium Scale Research Platforms**
- **Next Generation supervised Motion Simulator Arcade Systems**
- **Home Built Flight Simulators for up to 2 people**
- **Home Built Car Racing Simulators.**

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## General Description and Capabilities

The CKAS VersaFRM is based around the CKAS T5 and T10 2DOF Motion Systems, which feature some incredible response and fidelity. The VersaFRM allows a professional simulator builder or home user to "quickly" build a sizeable motion simulator from typically available components such as monitors, gaming controllers and seats, often already purchased for previous home set ups, and finally adds the most sought after quality of a real simulator - motion.

The CKAS VersaFRM features a 2100mm total width with typical monitors mounted, and sits less than 1900mm high. It is integrated with a T5 or T10 motion system, whose floor sits at 770mm high, therefore requiring the need for a specialised stair or gangway for stepping up onto it.

The expected life of the VersaFRM is extremely high for its price point, and the maintenance requirements are minimal, especially important in commercial or consumer based applications.

The CKAS VersaFRM comes with the following inclusions:

- CKAS T5 or T10 2DOF Motion Platform (choice of 2 payloads)
- Rigid steel framework and assembling hardware (screws/brackets/etc) which requires some very basic assembly to hold the main structure on the motion platform
- Rigid prefabricated steel structure to hold up to three typical 32" LCD or LED monitors / TV's (VESA 200 x 200 and VESA 200 x 100 mounting holes) for total immersion.
- Rigid 25mm multi-ply floor for installing all the cockpit components such as seats, controls and other components.

The following items are NOT included in a CKAS VersaFRM:

- Computer is not included – The computer is provided by the customer since CKAS has no control over the final application. The computer must run Microsoft Windows XP/Vista/7 to interface with the motion system.
- Monitors / TV's are not included – most customers already own monitors for gaming, or alternatively they can be purchased locally cheaper than being shipped from CKAS in Australia (32" with low profile bezel and 200mm x 100mm or 200mm x 200mm mounting systems at rear are recommended).
- Cockpit Hardware is not included – The cockpit hardware is purely at the discretion of the customer, since they are providing the end result simulator.
- Seats are not included – Due to the fact that all customers have a different specification for the type of simulator that is required, CKAS does not provide seats for the simulation platform.

**For more information about software compatibility and performance characteristics, please see data sheet for CKAS T5 and T10 2DOF Motion Systems (2DOF Systems)**

## General Specifications

(Subject to change without notification)

Product Name	CKAS VersaFRM
Product Code	VERSAFRM
Product Number	26.0001.11
Product Description	Medium Scale 2 degree of freedom Simulation Platform
Harmonization Code (HS)	Electrical machines and apparatus, having individual functions, not specified or included anywhere. Typical numbers include: 854370 or 854380 or 8543.70.96.50 or 8543.70.90.99

## Mechanical Specifications

Framework material	Pre-Painted Mild Steel	
Visual System Architecture	Pre-Painted Triple Monitor Support Mild Steel Prefabricated Bracket	
Visual Field of View (w monitors)	120° Horizontal x 26° Vertical (at the design eye point)	
Motion System Adaptability	CKAS T5 2DOF Motion System	CKAS T10 2DOF Motion System
Nominal Width (with monitors)	2100 mm (82.7")	2100 mm (82.7")
Nominal Length	1500 mm (59.1")	1500 mm (59.1")
Nominal Height (with monitors)	1980 mm (78.0")	1980 mm (78.0")
Approx unit weight	285 kg (630 lb)	335 kg (740 lb)
Anchoring Specification	4 places 13mm holes distributed to be anchored with 10-12mm fasteners	

## Performance Specifications

Available User Payload	385 kg (850lb)	835 kg (1840lb)
Available User Moment of Inertia	250 kg.m <sup>2</sup> (5,930 lb.ft <sup>2</sup> )	350 kg.m <sup>2</sup> (8,300 lb.ft <sup>2</sup> )
Payload CG horizontal offset	Less than 100mm from Centroid of Flying Platform	
Payload CG Vertical offset	Less than 600mm high from top of Flying Platform	

For more information about performance characteristics, please see data sheet for CKAS T5 and T10 2DOF Motion System (2DOF Systems).

## Electrical Specifications

For more information about electrical characteristics, please see data sheet for CKAS T5 and T10 2DOF Motion System (2DOF Systems).

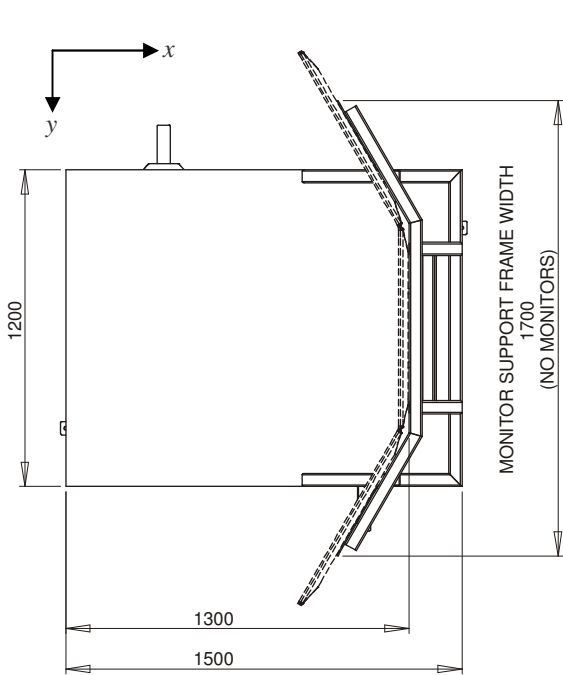
## Software Specifications

For more information about software compatibility, please see data sheet for CKAS T5 and T10 2DOF Motion System (2DOF Systems).

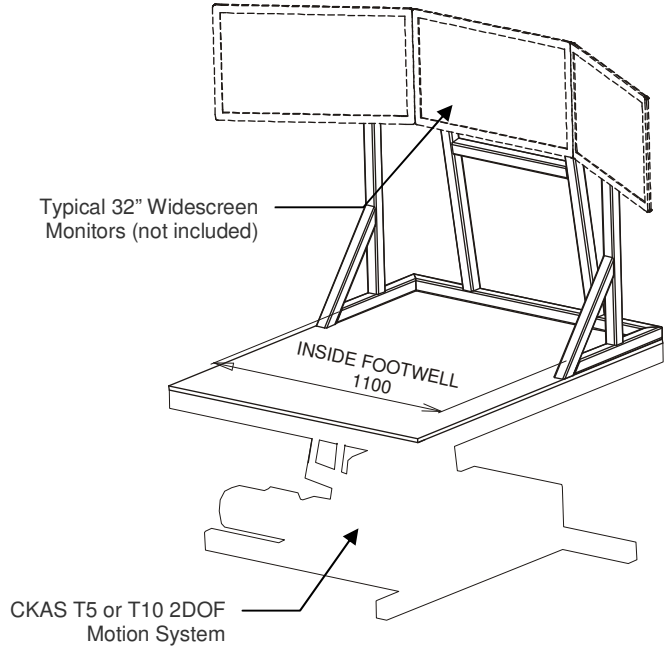
# CKAS VersaFRM Engineering Dimensions

(Subject to change without notification)

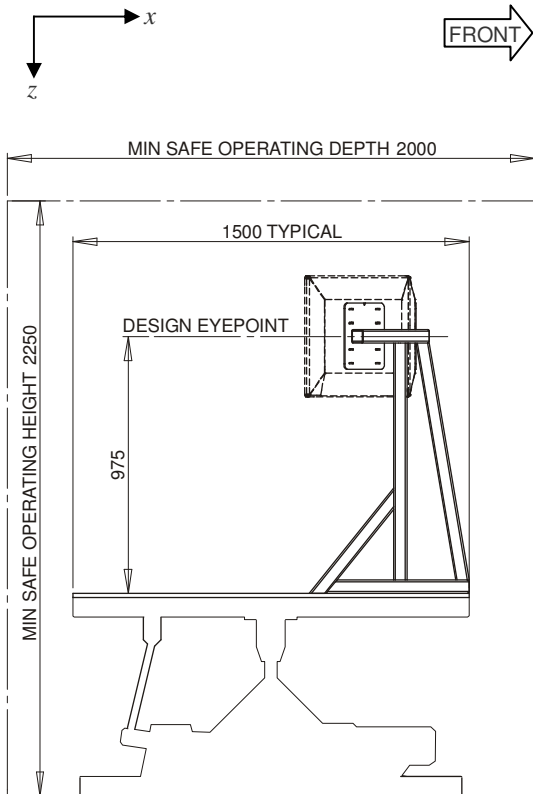
**View of Simulation Platform from TOP**



FRONT

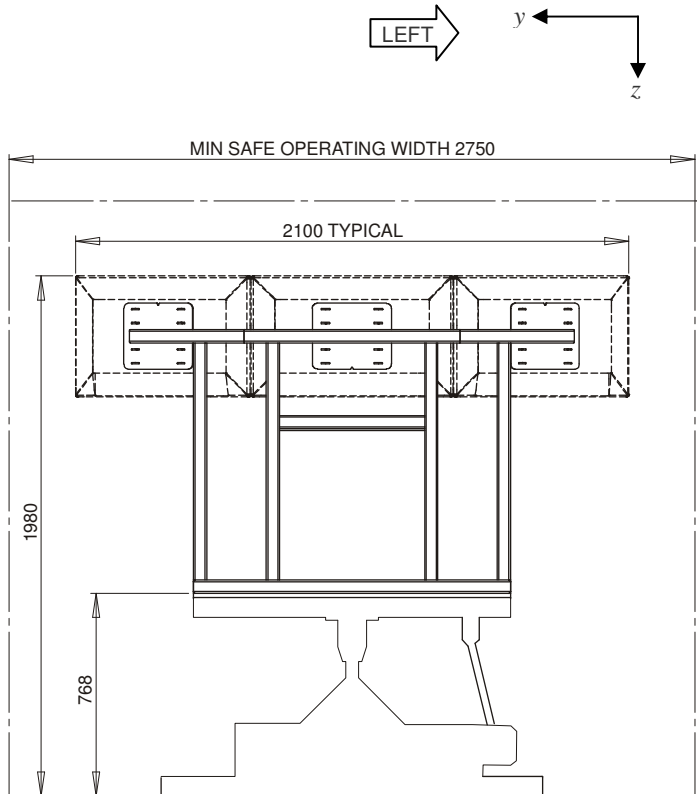


**View of Simulation Platform from RIGHT**



FRONT

**View of Simulation Platform from FRONT**



LEFT