MOTION COCKPIT

# QS-V20

**4DOF**
ARCHITECTURE

**<8ms**
LATENCY

**1000Hz**
MAXIMUM CONTROL FREQUENCY

**0.88G**
MAXIMUM ACCELERATION

**900mm/s**
MAXIMUM VELOCITY

**0-100Hz**
VIBRATIONS FREQUENCY RANGE

## MOTION COCKPIT **QS-V20**

The QS-V20 is an extended 4DoF motion cockpit, designed for pro racing car simulation, dedicated to both drivers training and sim racing enthusiasts. The motion system based on world's fastest linear actuator's technology provides incredible levels of vehicle feedback to the driver. This motion platform is suitable for Rally, GT and F1 simulations, also the small footprint and lightweight design allow to fit the machine to every racing room.

## KEY **FEATURES**

| | | | |
|---|---|---|---|
| Traction loss<br>Incredible oversteering feedback sensation | Compact design<br>Small footprint and lightweight body | Easy to deploy<br>Predefined set of motion profiles for various actuators configurations | Modular and Reconfigurable<br>Possibility to expand the system up to 8 cooperating actuators. |
| Wide range of motion<br>Linear actuators with stroke up to 100 mm | Super silent<br>Extremely quiet and smooth operation | Low power consumption<br>High performance devices with minimal power budget | Plug&Play<br>Ready to work in a few minutes |

# GENERAL **SPECIFICATION**

| | EXCURSIONS | Q-MODE 230V | | PERFORMANCE MODE 230V | | HEAVY DUTY MODE 230V | |
|---|---|---|---|---|---|---|---|
| | | VELOCITY | ACCELERATION | VELOCITY | ACCELERATION | VELOCITY | ACCELERATION |
| HEAVE | - 51.8 mm, 51.6 mm<br>- 2.039 in, 2.031 in | 0.90 m/s<br>35.4 in/s | 8.8 m/s² | 0.50 m/s<br>19.6 in/s | 5.9 m/s² | 0.35 m/s<br>13.7 in/s | 2.5 m/s² |
| ROLL | -7.6°, 7.6° | 140°/s | 1500°/s² | 80°/s | 1200°/s² | 60°/s | 450°/s² |
| PITCH | -5.5°, 5.5° | 40°/s | 500°/s² | 28°/s | 380°/s² | 20°/s | 150°/s² |
| YAW | -6.1°, 6.1° | 75°/s | 900°/s² | 50°/s | 710°/s² | 35°/s | 280°/s² |

| | |
|---|---|
| ARCHITECTURE | 4 DOF with **TRACTION LOSS** |
| MAXIMUM CONTROL FREQUENCY | 1000 Hz |
| VIBRATIONS FREQUENCY RANGE | 0-100 Hz |
| LATENCY | <8 ms |
| POWER SUPPLY REQUIREMENTS | 115 / 230 VAC Single Phase |
| CONNECTION | USB |

# PAYLOAD **SPECIFICATION**

| | |
|---|---|
| MAX USER WEIGHT | 150 kg \| 330.7 lb |
| PRODUCT WEIGHT | 280 kg \| 617.3 lb |

# MAIN **DIMENSIONS**

| | |
|---|---|
| TOTAL LENGTH | 1716 mm \| 67.55 in |
| TOTAL WIDTH | 1195 mm \| 47.04 in (with step) |
| TOTAL HEIGHT | 1020 mm \| 40.15 in (with step) |

# POWER **REQUIREMENTS**

| | Q-MODE **230V** | PERFORMANCE MODE 110 / **230V** | HEAVY DUTY MODE 110 / **230V** |
|---|---|---|---|
| AVERAGE POWER [kVA] | **1.6** | 0.8 /**0.9** | 0.5/**0.6** |
| PEAK POWER [kVA] | **3.1** | 1.2/**1.4** | 1.0/**1.2** |
| PEAK CURRENT [A] | **15** | 11/**7** | 9/**6** |
| AVERAGE POWER (STRESS TEST) [kW] | **0.06** | 0.4/**0.4** | 0.3/**0.3** |
| AVERAGE POWER (TYPICAL GAME) [kW] | **0.08** | 0.07/**0.08** | 0.07/**0.08** |

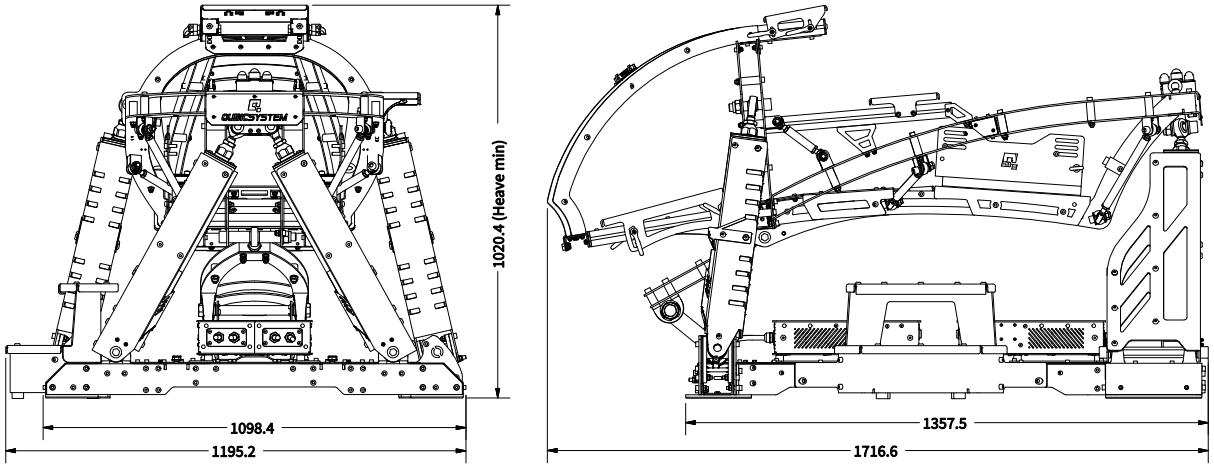
# SUPPORTED **TECHNOLOGIES**

VR HeadWay, VBS3/4 Plugin, Self Diagnostic, Self calibration

# OUR **SOFTWARE**

Qubic Manager (free of charge)| Motion SDK - ForceSeatDI | Motion SDK ForceSeatMI | Motion Theater

# GENERAL **DIMENSIONS**




# USE-CASE EXAMPLE - **DRIVING SIMULATOR**