



#### **MOTION SYSTEM**

# **QS-220**

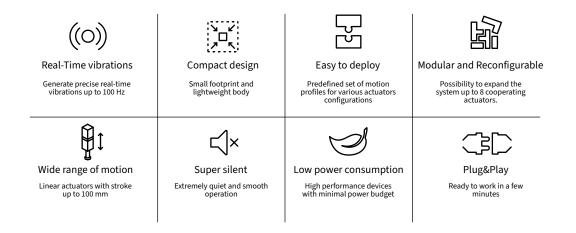


### MOTION PLATFORM QS-220

QS-220 patent pending technology of linear actuators allows to develop highly realistic applications with detailed motion textures, velocity, suspension interaction feedback, engine vibrations, tactile feedback, haptic system and vehicle dynamics.

Innovative technology, modular and compact design, as well as the quiet operation makes the QS-220 a perfect motion base not only for professional applications but also for home users in various types of cockpits. Additional sets of QS-220 can be configured as a 4 and 6 actuated system to provide 3/4/5/6 DOF using dedicated cockpits from Qubic System product line.

#### **KEY FEATURES**





#### **GENERAL SPECIFICATION**

	Q-MODE*** 230V	PERFORMANCE MODE*** 115 / 230V	HEAVY DUTY MODE*** 115 / 230V
MAXIMUM VELOCITY	800 mm/s	400 mm/s	300 mm/s
MAXIMUM ACCELERATION	LIMITED TO 0,8G*	LIMITED TO 0,7G*	LIMITED TO 0,4G*
MAXIMUM PAYLOAD IN 3DOF**	200 kg	250 kg	350 kg
*value of acceleration is limited for safety reasons.  **configuration of 2 x QS-220.  ***Q-MODE and PERFORMANCE MODE are available only in 3DOF configuration			

ARCHITECTURE	2/3/4/5/6 DOF (depending on user configuration and number of modules)
ACTUATOR STROKE	100 mm   3,93 in
MAXIMUM CONTROL FREQUENCY	1000 Hz
VIBRATIONS FREQUENCY RANGE	0-100 Hz
LATENCY	< 8 ms
PRODUCT WEIGHT	30 kg   66 lb

	QS-L1 ACTUATOR	QS-SB2 POWER CABINET
TOTAL LENGTH	106 mm   4.17 in	355 mm   15.16 in
TOTAL WIDTH	92 mm   3.62 in	300 mm   11.81 in
TOTAL HEIGHT	560-660 mm   22-26 in	92 mm   3.62 in

CABLE LENGTH (QS-L1 actuator - QS-SB2 Power cabinet)	1150 mm   45.2 in
POWER SUPPLY REQUIREMENTS	115 / 230 VAC Single Phase
CONNECTION	USB
CONFORMITY INFORMATION	C E ROHS

# POWER REQUIREMENTS IN 2DOF CONFIGURATION $_{(1\times QS-220)}$

	Q-MODE* <b>230V</b>	PERFORMANCE MODE* 110 / <b>230V</b>	HEAVY DUTY MODE 110 / <b>230V</b>
AVERAGE POWER [kVA]	1.2	0.7 / <b>0.9</b>	0.7/ <b>0.7</b>
PEAK POWER [kVA]	2.2	1.5/ <b>1.6</b>	1.5/ <b>1.5</b>
PEAK CURRENT [A]	10	13/7	12/7
AVERAGE POWER (STRESS TEST) [kW]	0.5	0.3/ <b>0.3</b>	0.3/ <b>0.3</b>
AVERAGE POWER (TYPICAL GAME) [kW]	0.03	0.05/ <b>0.04</b>	0.06/ <b>0.07</b>

QS-220 V1\_032024 www.motionsystems.eu 2/4



### QS-220 MOTION SET

QS-L1	2 pieces of linear actuators with stabilization plates
QS-SB2	1 pcs of power cabinet (control module)
QS-SBML-2	1 pcs of motion lock cable (up-link/down-link) - 2 meters long
Power cable	1 pcs of 1,8 m long cable for EU market / or 1 pcs of 2 m long cable for USA market

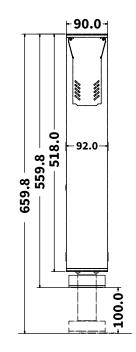
## QS-MC6 MOTION CONTROLLER SET

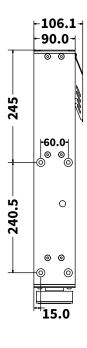
M10	1 pcs of USB controller
QS-SBML-1	1 pcs of motion lock with additional 2 m long cable
QS-MBT-1	1 pcs of M-BUS terminator
USB cable	1 pcs of 0,5 m long cable (USB micro B)
CAT.5E patch cord cable	1 pcs of 2 m long cable

#### **OUR SOFTWARE**

 $Qubic\ Manager\ (free-of-charge\ license\ included)\ |\ Motion\ SDK\ -\ ForceSeatDI\ |\ Motions\ SDK\ -\ ForceSeatMI\ |\ Motion\ Theater$ 

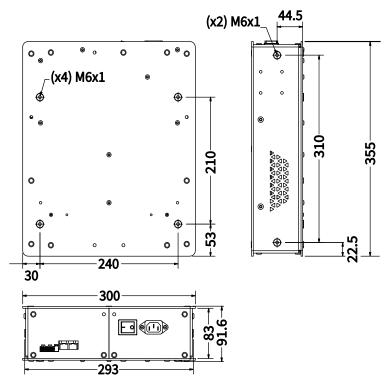
# QS-L1 ACTUATOR GENERAL DIMENSIONS







### QS-SB2 POWER CABINET GENERAL DIMENSIONS



## **QS-BRACKETS GENERAL DIMENSIONS**

