PowerBox Systems® Industrial

POWERCUBE VR

CONNECTORS OVERVIEW

Function	Count	Connector type	Voltage rating	Current rating max.	Current rating continous	Signaltype	Misc
Input connector	2	XT60	6.0V to 35.0V	60A	60A	DC	
Cube Sensors	8	JST GH type	5.0V	10A	8A		Current rating is for all JST GH type connectors together
CAN 1	1	JST GH type	5.0V	1A	1A	CAN-BUS	Used internally for telemetry data with PowerBox
CAN 2	1	JST GH type	5.0V	1A	1A	CAN-BUS	
GPS 1	1	JST GH type	5.0V	1A	1A	UART 3 / I²C 1	
GPS2	1	JST GH type	5.0V	1A	1A	UART 4 / I²C 2	
I²C	1	JST GH type	5.0V	1A	1A	I²C 2	
Telemetry 1	1	JST GH type	5.0V	1A	1A	UART 1	
Telemetry 2	1	JST GH type	5.0V	1A	1A	UART 2	
ADC	1	JST GH type	5.0V	1A	1A	Analog	Pressure Sensor
USB	1	JST GH type	5.0V	1A	1A	USB	Cube can be powered from this port
Main Servo outputs	18	Molex Nanofit	8.0V / 12.0V	24A	20A	PWM Framerate adjustable 12 ms to 21 ms	Current rating is for all Molex Nanofit connectors together. Current rating for Molex Nanofit is 8A. Output voltage is selectable in the menu.

Function	Count	Connector type	Voltage rating	Current rating max.	Current rating continous	Signaltype	Misc
Secondary Servo outputs	4	2.54 mm Pin-headers JR/Style connectors	6.0V / 7.4V / 8.4V	10A	8A	PWM Framerate adjustable 12ms to 21ms	Current rating is for this 4 servo outputs and the receiver connection together. Current rating for one Pinheader is 4A. Output voltage is selectable in the menu.
Receiver and data connectors	4	2.54 mm Pin-headers JR/Style connectors	6.0V / 7.4V / 8.4V	10A	8A		Current rating is for this 4 servo outputs and the receiver connection together. Output voltage is selectable in the menu.
Data	1	JR/Style connector	6.0V / 7.4V / 8.4V	4A	4A	UART	Dataport is used for updates or to save & restore the settings with the Mobile Terminal
FastTrack	1	JR/Style connector	6.0V / 7.4V / 8.4V	4A	4A	UART	FastTrack is used for the iGyroSat to use the PowerBox iGyro feature
RX 1	1	JR/Style connector	6.0V / 7.4V / 8.4V	4A	4A	UART	P²-BUS / S.BUS / EX-BUS / SRXL
RX 2	1	JR/Style connector	6.0V / 7.4V / 8.4V	4A	4A	UART	P²-BUS / S.BUS / EX-BUS / SRXL
ADSB	1	SMA	–	–	–	ADSB In	1090MHz
Power switch	1	Erni Minibridge	–	–	–	–	PowerBox electronic switch
Screen	1	Erni Minibridge	–	–	–	–	PowerBox TFT screen
Safety switch	1	Erni Minibridge	–	–	–	–	Safety/Arming switch for the Cube (optional available)