

Advanced Photonics Control Solutions

XPS DRIVER CARDS

The XPS is an extremely high-performance, user-friendly, integrated motion controller/driver offering convenient, high-speed communication through 10/100 Base-T Ethernet. With outstanding motion profiling, complex trajectory control, positioning accuracy and powerful programming functionality, the XPS is capable of addressing the most demanding motion applications for up to 8-axes of motorized positioners, while supporting 30 users working simultaneously.

The XPS controller is capable of driving a variety of motors using driver cards that slide into the back mainframe of the XPS. These factory-tested modules are powered by an internal 500 W or 750 W power supply that is independent of the controller power supply. For high-performance, back-drivable motors, a high-power, external driver is available.

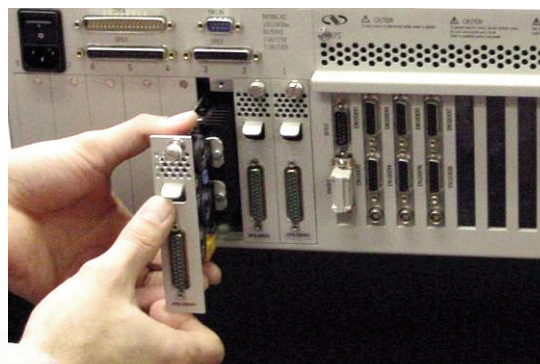
ORDERING INFORMATION

Model	Description
XPS-DRV11	Universal digital driver card for stepper, DC and direct motors
XPS-DRV00P	Pass-through driver module with pulse and direction capability
XPS-DRV01	PWM drive module for DC brush and stepper motors, 3 A/43 V max.
XPS-DRV02	PWM drive module for brushless motors, 5 A/44 VPP max.
XPS-DRV02L	Low Noise drive module for brushless motors, 2 A/44 VPP max.
XPS-DRV02P	Low Noise drive module for brushless motors, 7 A/44 VPP max.
XPS-DRV03	High performance PWM drive module for DC motors, 5 A/43 V max.
XPS-DRV01	NanoPositioning drive module for piezo-stack based products
XPS-EDBL⁽¹⁾	High-power, 3-phase, sinusoidal DC brushless motor driver

¹⁾ Requires pass through card XPS-DRV00P (supplied), for proper connection.



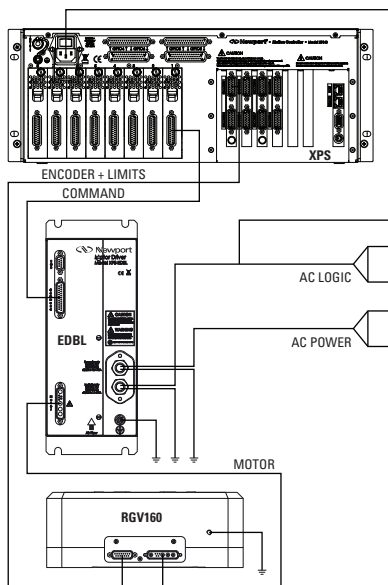
XPS-EDBL's continuous power: 600 W without fans, 1000 W with fans.



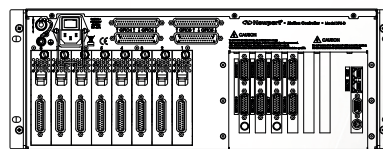
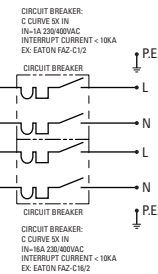
Installing driver cards.

SPECIFICATIONS

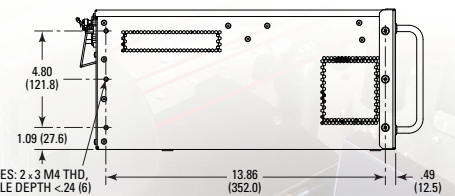
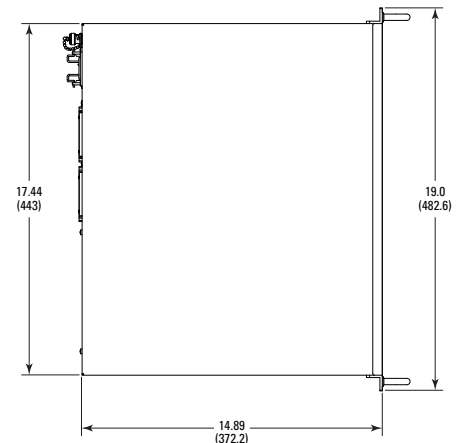
	XPS-DRV11	XPS-DRV00P	XPS-DRV01	XPS-DRV02	XPS-DRV02P	XPS-DRV02L	XPS-DRV03	XPS-DRV1P	XPS-EDBL
Number of Axis	1	1	1	1	1	1	1	1	1
Motor Type	Stepper, DC, Linear or Torque Motor	Pass through card	DC Motor and Stepper Motor	Brushless Motor (3-phase)	Brushless Motor (3-phase)	Brushless Motor (3-phase)	DC Motor and DC Motor equipped with tachometer	Piezo-stack	Brushless Motor (3-phase)
Driver Differentiators	Universal	Interface to external drivers with ± 10 V analog input commands, or pulse & direction capability	Standard	Standard	Higher resolution, Higher power	Higher resolution, Lower noise	Higher power, Voltage, Current or Velocity control	Standard	Higher resolution, Higher power
Drive Type	High frequency, nano PWM	–	PWM	PWM	PWM	PWM	PWM	LINEAR	PWM
Current Range/Voltage	6 A peak per channel 3 A continuous per channel	–	3 A/43 V	5 A/44 V	7 A/44 V	2 A/44 V	5 A/43 V	60 mA -10 V/+150 V	25 A/96 V
Max. Power	600 W peak 300 W continuous	–	144 W	180 W	250 W	72 W	240 W	9 W	1200 W (with fans) 576 W (without fans)
Connector Interface	DB25	DB25	DB25	THERM/EOR: DB9 Motor: DB9	THERM/EOR: DB9 Motor: DB9	THERM/EOR: DB9 Motor: DB9	DB25	DB25	Motor: 9W4 EOR: DB9 XPS: DB25
Operating Environment	0–40 °C 20–85% humidity No corrosive gases								
Mounting	XPS	XPS	XPS	XPS	XPS	XPS	XPS	XPS	External
Weight	0.36 lb (0.165)	0.71 lb (0.32 kg)	1.19 lb (0.54 kg)	0.79 lb (0.36 kg)	0.58 lb (0.27 kg)	0.58 lb (0.27 kg)	0.71 lb (0.32 kg)	1.5 lb (0.68 kg)	14.8 lb (6.7 kg)
Dimensions	8.50" x 4.69" x 0.99" (216 x 119 x 25.2 mm)								7.75" x 10.3" x 12" (121 x 262 x 305 mm)
Standards	CE, RoHS								



Example configuration schematic of the XPS controller and XPS-EDBL external driver.



MODEL SHOWN: XPS-DB
DIMENSIONS IN INCHES (AND MILLIMETERS)



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