

Optima Motion Controllers

Galil's Optima motor controllers are prior generation controllers that are still sold and supported by Galil. Galil offers Optima motion controllers in PCI, PC/104, ISA and Ethernet/RS232. These controllers are available as full-featured, multi-axis Optima controllers or as single-axis controllers.

Complete specifications are included on Galil's website.

	Multi-Axis Optima: Bus-based	Multi-Axis Optima: Stand-alone	Single Axis
Communication interface	PC/104: DMC-12x0 ISA: DMC-17x0 PCI: DMC-18x0	Ethernet/RS232: DMC-22x0 USB/RS232: DMC-20x0	PC/104: DMC-1411 RS232: DMC-1412 PCI: DMC-1417
Form factor	card	box	card
Number of axes	x=1,2,3,4,5,6,7,8	x=1,2,3,4,5,6,7,8	1
Connector type	100-pin SCSI	100-pin SCSI	37-pin D 40-pin for DMC-1411
Mating interconnect module	ICM-1900/-2900	ICM-2900	ICM-1460
Power requirement	5V, +/-12V	90-260 VAC	5V, +/-12V
Maximum encoder rate	12 MHz	12 MHz	8 MHz
Maximum stepper rate	3 MHz	3 MHz	2 MHz
Minimum servo update time	1-2-axes: 125 usec	1-2 axes: 250 µsec 7-8 axes: 625 µsec	1-axis: 375 usec
Optoisolated digital inputs	yes, except for DMC-12x0	yes	no
# of uncommitted digital inputs	1-4 ax: 8; 5-8 ax: 16	1-4 ax: 8; 5-8 ax: 16	7
# of uncommitted digital outputs	1-4 ax: 8; 5-8 ax: 16	1-4 ax: 8; 5-8 ax: 16	3
# of analog inputs	8	8	0
# of programmable I/O	64 (with DB-1x064)	64	0
Dual encoder for each axis	yes	yes	yes
Program memory size (lines x chr)	1000 x 80	1000 x 80	250 x 40
Array size (number of elements)	8000	8000	1000
# of variables	254	510	126
# of tasks for multitasking	8	8	2