

# Other — Optima Series

## PC/104, ISA, cPCI, PCI, Ethernet/RS232

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

Complete specifications are included in the following pages.

**PC/104, cPCI, ISA, PCI Optima 1-8 axes**  
**DMC-12x0, DMC-16x0, DMC-17x0, DMC-18x0 Series**    **Pages 74–77**

**Ethernet/RS232 and USB Optima 1–8 axes**  
**DMC-20x0 amd DMC-22x0 Series**    **Pages 78–81**

**ISA, PC/104, RS232, PCI Econo 1 axis**  
**DMC-1410, DMC-1411, DMC-1412, DMC-1417**    **Pages 82–85**

### PC/104, cPCI, ISA, PCI, Ethernet Optima 1–8 Axes Product Comparison Chart

	DMC-12x0	DMC-16x0	DMC-17x0	DMC-18x0	DMC-22x0
<b>Communication interface</b>	PC/104	cPCI	ISA	PCI	Ethernet 10/100Base-T RS232 x 2 (115 kb)
<b>Form factor</b>	card	card	card	card	box
<b>Number of axes</b>	x=1,2,3,4,5,6,7,8	x=1,2,3,4	x=1,2,3,4,5,6,7,8	x=1,2,3,4,5,6,7,8	x=1,2,3,4,5,6,7,8
<b>Connector type</b>	50-pin IDC x 2	100-pin SCSI	100-pin SCSI	100-pin SCSI	100-pin SCSI
<b>Mating interconnect module</b>	ICM-1900/-2900	ICM-1900/-2900	ICM-1900/-29000	ICM-1900/-2900	ICM-2900
<b>Power requirement</b>	5V,+/-12V	5V,+/-12V	5V,+/-12V	5V,+/-12V	90-260 VAC
<b>Maximum encoder rate</b>	12 MHz	12 MHz	12 MHz	12 MHz	12 MHz
<b>Maximum stepper rate</b>	3 MHz	3 MHz	3 MHz	3 MHz	3 MHz
<b>Minimum servo update time</b>	125 usec 1-, 2-axes	125 usec 1-, 2-axes	125 usec 1-, 2-axes	125 usec 1-, 2-axes	1-2 axes: 250 usec 7-8 axes: 625 usec
<b>Optoisolated digital inputs</b>	no	yes	yes	yes	yes
<b># of uncommitted digital inputs</b>	1-4 ax: 8; 5-8 ax: 16	8	1-4 ax: 8; 5-8 ax: 24	1-4 ax: 8; 5-8 ax: 24	1-4 ax: 8; 5-8 ax: 16
<b># of uncommitted digital outputs</b>	1-4 ax: 8; 5-8 ax: 16	8	1-4 ax: 8; 5-8 ax: 16	1-4 ax: 8; 5-8 ax: 16	1-4 ax: 8; 5-8 ax: 16
<b># of analog inputs</b>	8	8	8	8	8
<b># of programmable I/O</b>	64 (with DB-12064)	64	64 (with DB-14064)	64 (with DB-14064)	64
<b>Dual encoder for each axis</b>	yes	yes	yes	yes	yes
<b>Program memory size (lines x chr)</b>	1000 x 80	1000 x 80	1000 x 80	1000 x 80	1000 x 80
<b>Array size (number of elements)</b>	8000	8000	8000	8000	8000
<b># of variables</b>	254	254	254	254	510
<b># of tasks for multitasking</b>	8	8	8	8	8
<b>Drive options</b>	AMP-19520 AMP-19540	AMP-19520 AMP-19540	AMP-19520 AMP-19540	AMP-19520 AMP-19540	AMP-19520 AMP-19540
<b>Price: qty 1 (4-axis)</b>	DMC-1240: \$2195	DMC-1640: \$2495	DMC-1740: \$2195	DMC-1840: \$2195	DMC-2240: \$2595
<b>Price: qty 100 (4-axis)</b>	DMC-1240: \$995	DMC-1640: \$1145	DMC-1740: \$995	DMC-1840: \$ 995	DMC-2240: \$1295