ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
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Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

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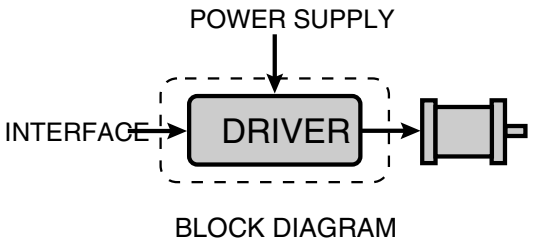
Find the *Intelligent Motion Systems IM804-PLG* at our website: *Click HERE*

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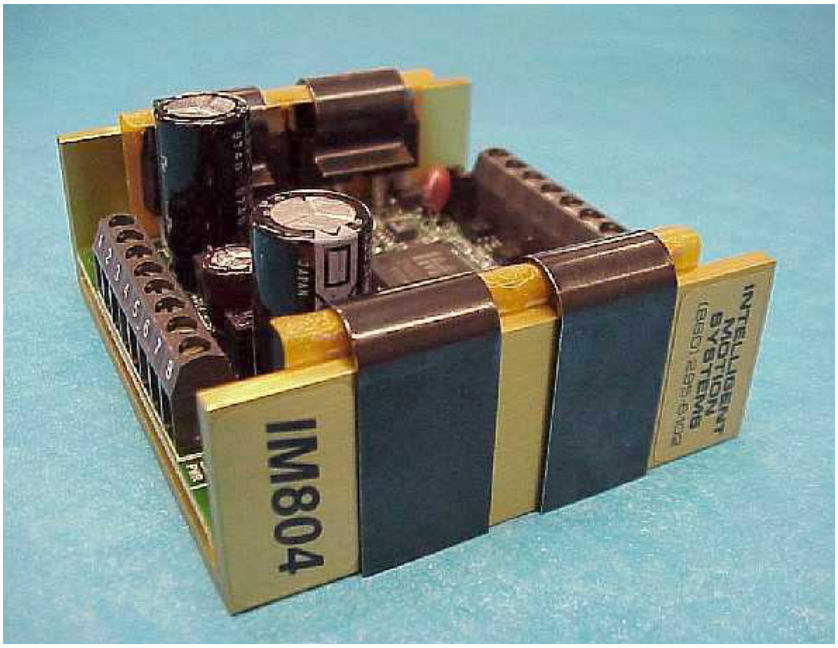
HIGH VOLTAGE MINIATURE MICROSTEPPING DRIVER

FEATURES

- Low Cost
- Extremely Small 2.7 x 3.0 in.
- High Input Voltage (75Vdc)
- High Output Current (4 Amps RMS, 6 Amps Peak)
- Single Supply
- Advanced Surface Mount and ASIC Technology
- Pin and Footprint Compatible with the IM483
- Designed for High Performance, Low Inductance Motors
- Opto-Isolated Inputs
- 20 kHz Chopping Rate
- Up to 10 MHz Step Clock Rate
- 14 Selectable Microstepping Resolutions Can Be Changed On-The-Fly
- Up to 51,200 Steps/Rev with 1.8° Motor
- Automatically Switches between Slow and Fast Decay for Unmatched Performance
- At Full Step Output
- Adjustable Automatic Current Reduction
- Short Circuit, Over/Under Voltage and Over Temperature Protection
- Fault Output
- Fault and Power LED's



BLOCK DIAGRAM



DESCRIPTION

The IM804 is a high performance, low cost microstepping driver that incorporates advanced surface mount and ASIC technology. The IM804 is small, easy to interface and use, yet powerful enough to handle the most demanding applications.

The IM804 has 14 different resolutions (both in binary and decimal) built into the driver. These resolutions can be changed at any time. There is no need to reset the driver. This feature allows the user to rapidly move long distances, yet precisely position the motor at the end of travel without the expense of high performance controllers.

The development of proprietary circuits has minimized ripple current while maintaining a 20 kHz chopping rate. This prevents additional motor heating that is common with drivers requiring higher chopping rates. Now low inductance stepper motors can be used to improve high speed performance and system efficiency.

The IM804 is pin and footprint compatible with our IM483 drive. This allows the same mechanical configuration to be used with systems that may utilize different power requirements.

The IM804 is priced lower to provide customers with affordable state-of-the-art technology for that competitive edge needed in today's market.

SPECIFICATIONS

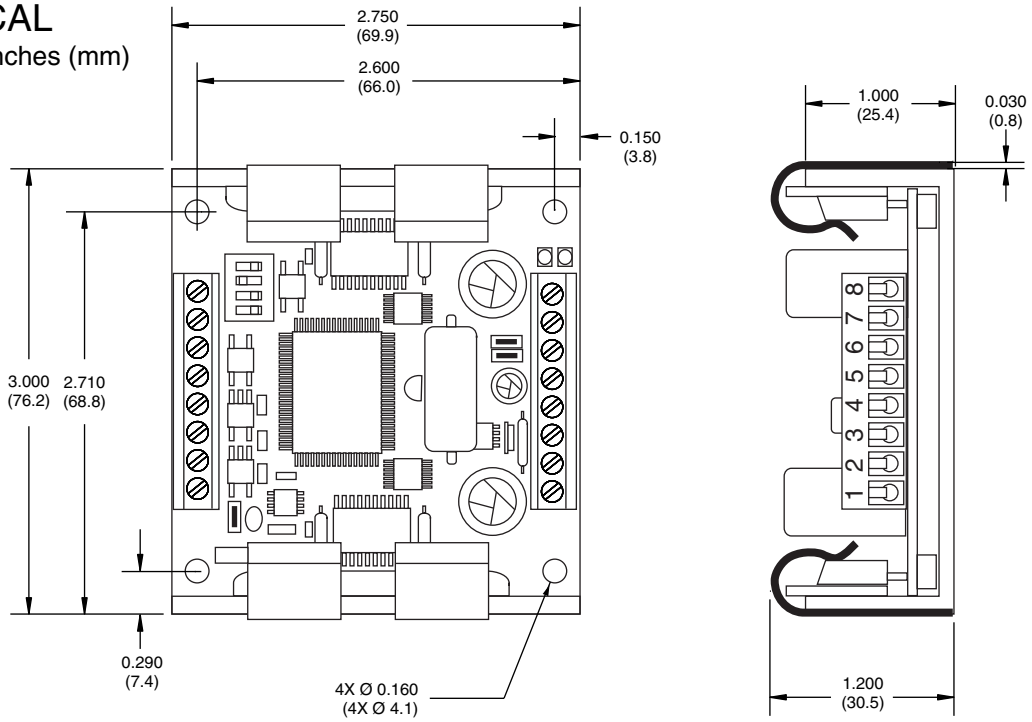
ELECTRICAL — IM804

Input Voltage	+24 to 75 Volts*
Drive Current (Per Phase)	1 to 4 Amps (RMS), 6 Amps (Peak)
Isolated Inputs	Step Clock, Enable, Direction, & Reset
Step Frequency (Max)	2 MHz (typical), 10 MHz (HS Version)
Steps per Revolution (1.8° Motor)	400, 800, 1000, 1600, 2000, 3200, 5000, 6400, 10000, 12800, 25000, 25600, 50000, 51200
Protection	Thermal, All Way Short Circuit, and Over/Under Voltage
Indicators	Fault (Red) & Power (Green) LED's

*Recommended Power Supply: ISP200-7

MECHANICAL

Dimensions in Inches (mm)



TEMPERATURE

Storage	- 40 to +125° C
*Case (Max)	0 to +70° C

*External heat sink may be required to maintain case temperature below 70° C.

OPTIONS

TN - 48	Thermal Pad
- 8P2	8 Position 0.045 sq Pin P2 Connector with 8 Position 0.025 sq Pin P1 Connector
- 34P1	34 Position 0.025 sq Pin P1 Connector
- PLG	Plug Type Terminal Strips for P1 and P2 Connectors
- HS	10 MHz Step Clock Input
H - 4X	Heat Sink

PIN FUNCTIONS

Connector P1 (8 Pin)

1. No Connection
2. Step Clock
3. Direction
4. Opto Supply
5. Enable
6. Reset
7. Fault
8. On Full Step

*Connector P1 (34 Pin)

3.	Resolution Select 3	16, 26.	On Full Step
4.	Step Clock In	21.	Step Clock Out
6.	Direction In	22.	Direction Out
8.	Opto Supply	23.	Resolution Select 0
10.	Enable	24.	Resolution Select 2
12.	Reset	25.	Resolution Select 1
14.	Fault	27.	Ground

*Pins not shown are no connections.

Connector P2

8. Phase A
7. Phase $\overline{A}$
6. Phase B
5. Phase $\overline{B}$
4. V+ (24V to 75V)
3. Ground
2. Current Adjust
1. Reduction Adjust

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

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We're here to make your life easier. How can we help you today?

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