

# IM481H Plus <sup>CE</sup> <sup>RoHS</sup>

**HIGH PERFORMANCE  
ULTRA-MINIATURE  
MICROSTEPPING DRIVER**



## FEATURES

- Very Low Cost
- Ultra Miniature  
(1.1 x 2.7 x 0.175 inches)  
(28 x 69 x 4.4 mm)
- Advanced Hybrid Design
- High Input Voltage  
(+12 to +48 VDC)
- High Output Current  
(1.5 Amps RMS, 2.1 Amps Peak)
- Replaces Mechanical Gearing for  
Smoothness and Positioning
- Up to 51,200 Step/Rev with  
1.8° Motor
- No Minimum Inductance
- 16 Selectable Microstepping  
Resolutions can be Changed  
On-the-Fly
- Automatically Switches  
Between Slow and Fast Decay  
for Unmatched Performance
- Adjustable Automatic Current  
Reduction
- Short Circuit and Over  
Temperature Protection
- Fault Output
- At Full Step Output

## DESCRIPTION

The IM481H PLUS is a high performance, yet low cost microstepping driver that utilizes advanced hybrid technology to greatly reduce size without sacrificing features. The IM481H PLUS is exceptionally small, easy to interface and use, yet powerful enough to handle the most demanding applications.

The IM481H PLUS has 16 built-in microstep resolutions (both binary and decimal). The resolution can be changed at any time without the 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.

With the development of proprietary and patented circuits, ripple current has been minimized to reduce motor heating common with other designs, allowing the use of low inductance motors to improve high speed performance and system efficiency.

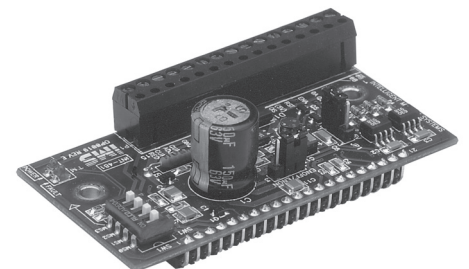
The IM481H PLUS, because of its ultra small size and low cost, can be used to increase accuracy and smoothness in systems using higher step angle motors. In many instances mechanical gearing can be replaced with microstepping, reducing cost and eliminating potential maintenance.

The IM481H PLUS was developed to provide designers with affordable, state-of-the-art technology for the competitive edge needed in today's market.

## OPTIONS

The INT-481 is an optional plug-on interface board which can be used with the IM481H PLUS to facilitate testing, or in situations where panel mounting the IM481H PLUS is preferred. The INT-481 contains extra circuitry which includes +5 VDC supply, opto isolators for step clock, direction, enable and reset, along with extra fault detection circuits, input capacitor, and fault and power LEDs. Wiring is done through a 15 pin screw terminal. A four position dip switch is supplied for microstep resolution selection.

The H-481 is a small, optional heat sink which mounts easily to the IM481H PLUS or the INT-481H/IM481H PLUS combination. Its compact size consumes only 4.3 cubic inches (70.5 cubic cm) of space. All required mounting hardware is included with the heat sink.



INT-481 Interface Board

