

## Three Highly Sensitive Amplifier Models

# T-01HGAZ/MGAZ/LGAZ (photos are of T-01HGAZ)

### Features

Products for use in amplifying ultra-small signals to the necessary adequate level. For example, the input voltage level of AD convertors generally inserted into the IO slot of a PC is mainly either 5V or 10V, or 2.5V at the lowest, due to the need to take any digital noise into account, and have therefore been incapable of handling lower voltages.

An amplifier therefore typically needs to be used. A number of high-performance amplifiers are available on the market but are generally quite expensive, thus being a hurdle to their use. These amplifiers, however, boast the necessarily adequate performance while at the same time being available at a very reasonable price.

Three different models with different gains are available according to the purpose.

Their power supply supports direct current voltage and therefore can also operate on batteries. An additional feature is they are also compact and lightweight, and thus can be easily used anywhere, both indoors and outdoors.

All the models are also RoHS compliant.



Rear Panel

### Specifications

Number of Inputs	1 Channel
Input Method	Differential Input (BNC Connector)
Common Mode Rejection Ratio	approx. 50dB (100Hz)
Input Resistance	2MΩ + 10pF or lower (differential)
Gain	T-01HGAZ: Switched between x100/x1000/x10000 (gain error within ±5%/1KHz) T-01MGAZ: x10/x100/x1000 (same as above) T-01LGAZ: x1/x10/x100 (same as above)
Flank Time	approx. 2.8V/μsec
Low Pass Filter	Cutoff Frequency 1kHz/10kHz/30kHz/OFF (6dB/oct)
Max. Output Voltage	approx. ±12Vp (power supply voltage ±15V)
Max. Output Current	approx. 10mA <sub>p</sub>
Output Resistance	50Ω
Power Supply Voltage Range	DC ±8V ~ ±15V
Consumed Current	approx. ±18mA (power supply voltage ±15V)
Operating Temperature	5C ~ 45C (recommended operating temperature of 25C)
Dimensions	80 (W) x 34 (H) x 75 (D) mm
Weight	approx. 200 g (Only main body with cables not included)

### Accessories

Power Supply Cable (1 m)	1 set
Cable for Dry Batteries (006P, 9V, 6F22, 6LR61, 6LF22)	1 set
Case Feet (set of 4)	1 set

Both the specifications and usage are subject to change from improvements. Free warranty period of 6 months.

We contract the development, design, and manufacture of various systems using electronic and computer technologies.



Turtle Industry Co., Ltd

1-12-4, Nishine Minami, Tsuchiura, Ibaraki,  
Japan, 300-0842  
Tel: +81-29 (843) 0045 Fax: +81-29 (843) 2024  
URL: <http://www.turtle-ind.co.jp>  
E-mail: [tokyo@turtle-ind.co.jp](mailto:tokyo@turtle-ind.co.jp)

December 11, 2012