

The Gate Drive is suitable for Next Generation (NG) IGBT Modules such as nHPD² and LinPack. The gate drive will support 3300V, 1700V and 1200V NG IGBT modules and is designed to fit within the footprint of the IGBT module to allow the NG IGBT modules to be butted up against each other and still meet creepage and clearance rules. The gate drive is suitable for 2-level and multi-level converters in a wide variety of applications.



Key Benefits

- Compact design, the NG gate drive fits within the footprint of the IGBT module
- Support for Hitachi nHPD² and ABB LinPack IGBT modules
- Support for 1200V, 1700V and 3300V NG IGBT modules
- Feedback protocol configurable to legacy gate drives
- High reliability design and testing
 - Manufactured to ISO9001
 - Designed and tested to international standards for rail and motor drives
- Conformal coating available on request
- Two level or three level mode
- On board isolated DC-DC power supply (Available with 15V or 24V input)
- Protection features
 - IGBT short circuit protection through desaturation protection
 - Under voltage lockout
 - Monitors all power rails for safe start-up with IGBT held off
- LED status indication
- Monitoring of baseplate NTC (where fitted)
- Insulation designed for rail traction and variable speed drive applications

Outline Specification

- Dual channel Plug & Play solution for Next Generation IGBT Module packages
- Drive circuit features
 - Turn on and turn off resistors (R_{gon}, R_{goff})
 - Soft turn off resistor (R_{goffsoft})
 - Gate – Emitter Capacitor (C_{ge})

Standards Compliance

The NG gate drive is designed and tested to meet the following standards:

- EN 50155 for railway applications
- IEC 61800-5-1 for variable speed drives
- Mechanical shock and vibration tested to IEC 61373
- EMC tested to EN 50121-3-2, EN 50121-5, IEC 61800-3
- Flammability rating to UL94V-0



Medium voltage motor drives



Locomotive traction & marine drives



Wind turbine & solar inverters



High voltage DC infrastructure

Applications

Amantys gate drivers are suitable for all high power converter applications. Typical uses include:

- Railway traction applications
 - Traction motor drives
 - Trackside converters
- HVDC infrastructure
- Low and medium voltage converters
- Low and medium voltage motor drives
- Wind turbine converters
- Solar inverters



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Locomotive traction
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Wind turbine &
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High voltage DC
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