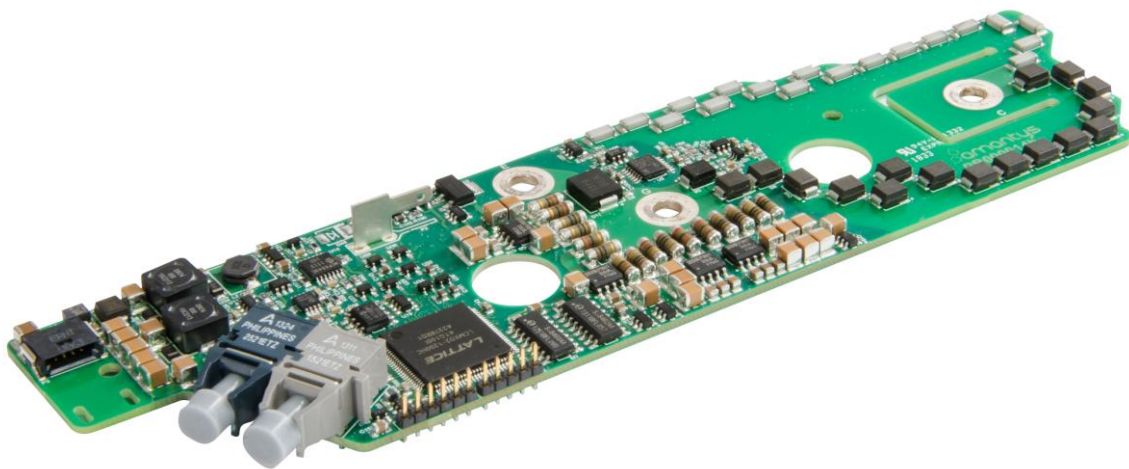


The AP33, AP45 and AP65 Amantys Gate Drives incorporate Amantys Power Insight™ technology to allow remote configuration and condition monitoring of the IGBTs in a converter. Capable of driving a range of IGBT modules from different manufacturers, these drives reduce inventory for users who want flexibility in design and sourcing through programmable reconfiguration. The gate drives are suitable for 2-level, 3-level and multi-level converters in a wide variety of applications.



Key Benefits

- User configurable
 - Reduced inventory as one gate drive can support IGBT modules from multiple vendors
 - Simplified design and commissioning
- Improved converter management
 - Multiple fault codes for error detection
- Condition monitoring of power electronics
 - Monitor key parameters remotely and safely
 - Long term tracking fault codes
- Compatible with commercial alternatives
 - Drop in replacement with same fibre-optic and power interfaces
- High reliability design and testing
 - Manufactured to ISO9001

Outline Specification

- Single channel Plug & Play solution for 190x140mm and 140mmx130mm packages
- User configurable parameters
 - Turn on and turn off resistors (R_{gon} , R_{goff})
 - Soft turn off resistor ($R_{goffsoft}$)
 - Fault lock out time (t_{lock})
 - Two level or three level mode
 - Feedback protocol can be modified to be compatible with legacy systems
- IGBT short circuit protection through desaturation protection
- Under voltage lockout
- Monitors all rails for safe start-up with IGBT held off
- Active clamping mechanism (two zone)



Medium voltage motor drives



Locomotive traction & marine drives



Wind turbine & solar inverters



High voltage DC infrastructure

Amantys Power Insight™

Amantys Power Insight™ technology provides two way communication from the central controller or Power Insight Adapter to the gate drive. The converter designer can perform the following functions:

- Remote configuration of the gate drive
- Condition monitoring of key IGBT parameters
- Examine a wide range of fault code outputs
- Monitor faults codes during the lifetime of the converter

Applications

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

- HVDC infrastructure
 - HVDC and FACTS
- Medium voltage converters
- Medium voltage motor drives
- Solar inverters
- Traction converters
- Wind turbine inverters

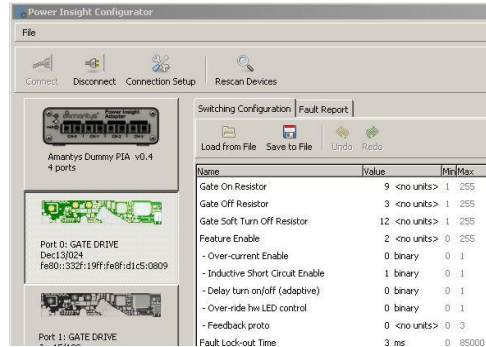
Supporting Products

Power Insight Adapter



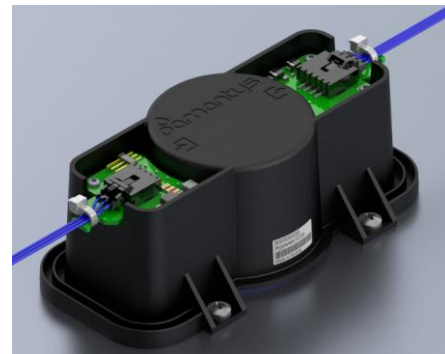
The Power Insight Adapter allows a Windows based PC to interface to four Power Insight enabled gate drives.

Power Insight Configurator



The Power Insight Configurator is a Windows PC based software tool that can be used to configure a Power Insight enabled gate drive and monitor the fault reports generated by the gate drive.

High Isolation DC DC Converter



The high isolation voltage DC DC Converter is a power supply with up to 12kV isolation voltage intended for use with high voltage IGBT modules such as the 3300V (high isolation voltage package), 4500V and 6500V HPM packages. The DC DC power supply features include: a maximum power output of 8W (with 15V input); a peak efficiency of 90%; 15V or 24V input voltage and a DC or peak isolation voltage of 12kV.

