

AGD200

AGD200 series is a family of compact, high performance motion control units with 2 integrated servo amplifiers, allowing it driving 2 motors and control third axis through an external drive. It is equipped with Ethernet, USB, CAN bus, RS232 and RS485 communication ports to interface with any host devices. With 16 kHz sampling frequency, this product is ideal for any tightly coordinated motion systems. It supports a very wide range of bus-voltage from 12Vdc to 90Vdc and each axis can supply up to 5.6Arms continuous current and 11.2Arms peak current concurrently.

Equipped with a plethora of I/Os: 11 isolated digital inputs, 4 isolated digital output, 4 analog inputs, 4 analog outputs and 8 differential inputs, this product is fully capable of handling standalone applications. The typical use case of this product is in 3D printers, security surveillance camera systems, mobile robots, and factory automations.



AGD200 General Specifications

Description	AGD200-ET-2D01	AGD200-ET-2D02	AGD200-ET-2D05
Number of Axes	2 (3 rd axis with external drive)		
Power Supply	12-90 VDC		
Logic Power supply (optional)	12-36 VDC		
Continuous Current	1.4 Arms	2.8 Arms	5.6 Arms
Peak current	2.8 Arms	5.6 Arms	11.2 Arms
Isolated inputs ¹	11		
Isolated outputs ²	4		
Differential Inputs	8		
Differential Outputs	4		
Analog inputs	4 (12-bit, 16 bits analog input with extension board)		
Analog outputs	4 (16-bit)		
Brake output ³	2		
Encoder Inputs	3 Ports (each port is software configurable as AquadB, Absolute Biss-C or EnDat2.24). Ports 1 and 2 support also Sin/Cos 1Vpp encoders		
Motor Types	Voice Coil, Brushed/Brushless Linear or Rotary Motor, 2-Phase Steppers (Open and Close Loop, micro-stepping)		
Communication	Ethernet, CAN bus, RS232, USB, RS485		
Control Sampling rate	16 KHz (profiler, position, velocity, optional force, current)		
Operational Modes	Position, Velocity, Force or Current (Torque) modes		
Motion Modes	Point to Point, Repetitive, Jog, ECAM, Gearing, Joystick, Handwheel, Pulse & Direction, Gantry, CNC sequential contour (G-codes) , Vector and Tracking motion modes. Motion parameters, such as speed, acceleration, deceleration, and target position can be all modified on-the-fly.		
Features	Encoder Error Mapping: 1D, 2D or 3D, Auto-Loop Shaping (auto-tuning), Frequency Domain System Identification and Modelling, Flexible Gain Scheduling, Position Lock and Event, Ultra-Precision Mode (UPM), Input-Shaping, Profile-Shaping, Machine Vibration Control, Spring and Friction Compensation, Complex-Kinematics (robot kinematics), etc.		
Programming Interfaces	Standalone User Program – high level script-based program executed in the controller (up to 8 multi-threading programs with priority setting for each thread). IDE integrated in PCSuite Windows .Net API – available in NuGet Manager. Standard TCP/IP communication – ASCII string commands or binary CAN format.		

¹ Note 1: Digital isolated input can be configured as NPN or PNP, in groups of 3 or 4.

² Note 2: Digital isolated output can sink up to 500mA or source up to 300mA.

³ Note 3: 16-bit analog inputs available in some product options. Consult your sales channel.

⁴ Note 4: EnDat 2.2 supported by dedicated FPGA version (consult with sales engineer).

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Ordering Information

Product Part Number	Description	Optional Accessories	Accessories Description
AGD200-ET-2D01	Dual-axis Drive – 90Vdc, 1.4Arms continuous current	AGD200-ET-CK	AGD200-ET Connector Kit
AGD200-ET-2D02	Dual -axis Drive – 90Vdc, 2.8Arms continuous current		
AGD200-ET-2D05	Dual -axis Drive – 90Vdc, 5.6Arms continuous current		