

Analog Output Module, 13-Bit, 8 or 12 Channels

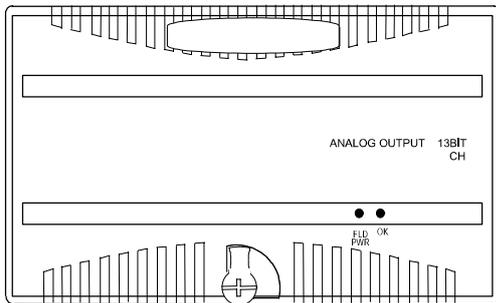
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GFK-2526

Product Description

Analog output modules IC200ALG325 and BXIOAO8210 provide eight analog voltage outputs. Analog output modules IC200ALG327 and BXIOAO12210 provide twelve analog voltage outputs. The output range for these modules can be either -10VDC to +10VDC (bipolar) or 0V to +10VDC (unipolar).

Analog output module IC200ALG326 provides eight 4mA to 20mA analog current-sourcing outputs. Analog output module IC200ALG328 provides twelve 4mA to 20mA analog current-sourcing outputs. Including a modest amount of overrange current, approximately 20.38mA of output current per channel is available to drive output loads.



An external power supply is required for the outputs.

Intelligent processing for this module is performed by the CPU or Network Interface Unit.

LED Indicators

The green FLD PWR LED indicates the presence of user-side power for the analog field-side circuits.

The green OK LED is on when backplane power is present to the module.

Diagnostics

The module reports a Loss of User Side Power fault for field-side circuits.

Configuration Parameters

The module has a default output range, but is easily set up with a jumper to change the output range.

The module is also easily set up with a jumper for the outputs to either hold their last states or default if backplane power or communications are interrupted or the PLC is stopped. External user power must remain uninterrupted.

Outputs remain in their default or last state until the module receives different output data from the backplane, or until field power is removed.

Preinstallation Check

Carefully inspect all shipping containers for damage. If any equipment is damaged, notify the delivery service immediately. Save the damaged shipping container for inspection by the delivery service. After unpacking the equipment, record all serial numbers. Save the shipping containers and packing material in case it is necessary to transport or ship any part of the system

Module Characteristics

Channels	IC200ALG325, BXIOAO8210, IC200ALG326: 8 single ended, one group IC200ALG327, BXIOAO12210, IC200ALG328: 12 single-ended, one group
Module ID	IC200ALG325 / BXIOAO8210: FFFF9080 IC200ALG326: FFFF9480 IC200ALG327, BXIOAO12210: FFFF90C0 IC200ALG328: FFFF94C0
Isolation:	User input to logic (optical) and to frame ground: 250VAC continuous; 1500VAC for 1 minute Group to group: Not applicable Channel to channel: None
LED indicators	FLD PWR LED indicates field power is present OK LED indicates backplane power is present
Backplane current consumption	5V output: 50mA max.
Thermal derating	IC200ALG328 only: see diagram. Other modules, no derating.
Configuration parameters	Range, output default
Diagnostics	Loss of User Side Power

External Power Supply

IC200ALG325, BXIOAO8210	Range: +10 to +30VDC including ripple Current consumption: 102mA maximum
IC200ALG326	Range: +18 to +30VDC Current consumption: 2A inrush maximum, 100mA maximum (no load) 185mA maximum (all 8 outputs at full scale)
IC200ALG327, BXIOAO12210	Range: +18 to +30VDC including ripple Current consumption: 112mA maximum
IC200ALG328	Range: +18 to +30VDC Current consumption: 2A inrush maximum, 100mA maximum (no load) 270mA maximum (all 12 outputs at full scale)

Output Characteristics

Output voltage for IC200ALG325, BXIOAO8210, IC200ALG327, BXIOAO12210	-10.24 to +10.24VDC (bipolar range) 0 to +10.24VDC (unipolar range)
Output current for IC200ALG326, IC200ALG328	4 to 20mA (default) 0 to 20mA (configured with jumper)
Load characteristics for IC200ALG325, BXIOAO8210, IC200ALG327, BXIOAO12210	Resistive: 5000 Ohms minimum Capacitive: 1.0µF maximum
Load characteristics for IC200ALG326, IC200ALG328	Resistive: 0 to 800 Ohms maximum* Capacitive: 1.0µF maximum Inductive: 0.5H maximum
Accuracy at 25 degrees C** 0 to 60 degrees C	+/-0.3% typical of full scale, +/-0.5% maximum of full scale +/-1% maximum of full scale
Resolution	IC200ALG325, BXIOAO8210, IC200ALG327, BXIOAO12210: 1.25mV = 4 counts IC200ALG326, IC200ALG328: 4-20 mA: 5 counts = 2.5 µA (~12.7 bits) 0-20 mA: 4 counts = 2.5 µA (13 bits)
Update rate per module	IC200ALG325, BXIOAO8210: 10 mSec maximum IC200ALG326, IC200ALG327, BXIOAO12210: 15 mSec maximum
Channel-to-channel crosstalk rejection	70dB minimum
Output default	Configurable

$$* R_{L(MAX)} = (V_{FIELD PS} - 4V) / 20.38mA$$

** In the presence of severe RF interference, (IEC 1000-4-3, 10V/m), accuracy may be degraded an additional +/-1%.