

GPIB AD-CONVERTER

ADM-828GP

GPIB 12bit A/D Converter with 256KWords buffer Memory inside

*** Description**

This device is AD-Converter with GPIB interface. It has the performance of 12-bit resolution, 8 channels of analogue input and 256K-data of data memory.

The range of voltage for analogue input are $\pm 10V / \pm 5V / \pm 2.5V$, and be selected by setting inner DIP-switch.

Speed of AD-convert is 10 *mSec* and available 100KHz-continuous-sampling in case of using Channel-0 only. Further, a load factor on control PC is negligible because of inner 256K-Words Buffer Memory.

Control commands from PC are based on IEEE 488.2. GPIB address of this device is optionally selected by setting DIP-switch in the rear.

ADM-828GP has a digital input/output function, and it's available to read status of this 8-bit digital-input, from PC anytime. It has also function which asserts SRQ signal when Status-Input changes, and function which responds to serial pole. 1-bit output is based on TTL level.



*** USE**

Auto Measuring System:

GPIB allows several devices to be interconnected on one bus, so it's available to make a large scale measuring system by connecting this device with other devices to the control PC. Comparing with such as multi-meters which measure data at dozens of times/sec, this device is available to measure data at maximum 10,000 times/sec.

*** Specifications**

Channel Numbers	8 channels (single-end)		
Input Voltage Range	$\pm 2.5V$, $\pm 5V$, $\pm 10V$ (to be selected by Jumper setting)		
Max. Input Voltage	$\pm 35V$		
Input Impedance	over 100M Ω		
Resolution	12-Bit		
Max. Sampling Speed (in case of single trigger)	single-channel	10 <i>mSec</i> (100KHz)	
	multi-channel	(10 \times active channel numbers) <i>mSec</i>	
Nonlinearity Max.	$\pm 0.025\%$ FS		
Accuracy (*1) (worst value)	$\pm 10V$	$\pm 0.105\%$ FS (at ordinary temperature, with optimum regulation)	
	except for $\pm 10V$	$\pm 0.125\%$ FS (at ordinary temperature, with optimum regulation)	
Inner Noise (*2) typ	± 1 LSB		
AD Data Code	Offset Binary		
Buffered Memory	256K Words (256K Data)		
Power Consumption	AC85 to 132V (50Hz to 60Hz) below 22VA		
Operating Condition	0 to 45 degrees Celsius (without freeze / without condensation)		
Dimension	280W \times 170L \times 45H(mm) (excluding projection)		
Accessories	Operation Manual, Command Manual		Each 1 set
	connector for terminal	connector (57-30500) (Made by DDK)	1 pc.
	for AC power supply	inlet cord (with 2P3P changeable plug)	1 pc.
	Fuse (spare)	Glass-tube Fuse 1A	1 pc.

*1: Including 0.03% of error of calibration tester, and excluding inner noise.

*2: This Data shows at AD-Board only

*** Input command**

INPUT Command

Command	Parameter	Remark
:INPut [:DATA]?	CH name (AD0 to 7)	Read A/D data of designated CH

MEMORY Command

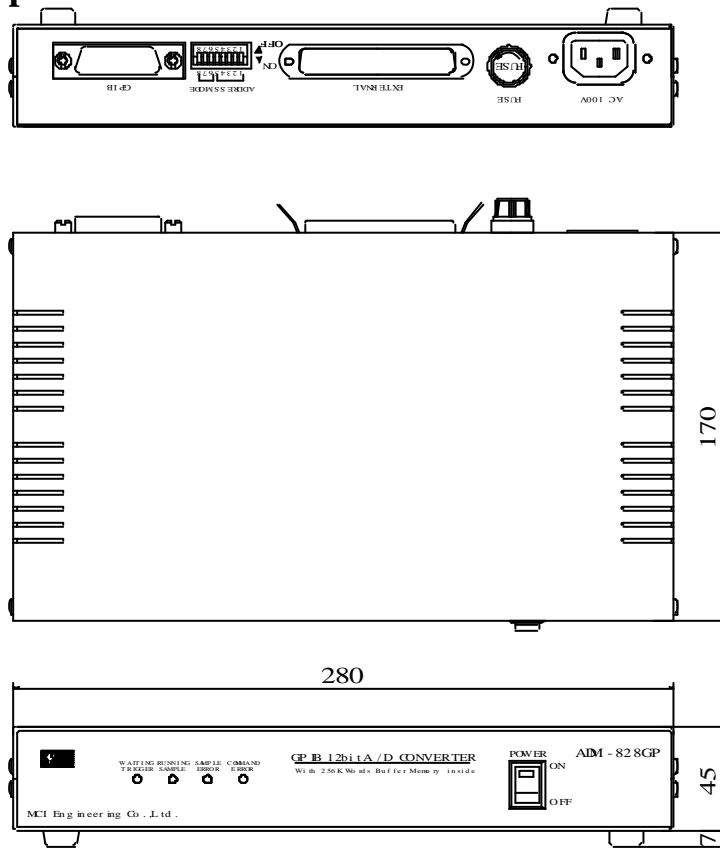
Command	Parameter	Remark
:MEMory :READ [:NEXT]?	CH name, Num of Words	Read sampling data from read-point, then, shift read-point to the next

*** Command for Sampling**

SAMPLE Command

Command	Parameter	Remark	Initial Value
:SAMPlE :CLOCK :PERIOD :SOURce	Sampling clock dividing ratio Clock source, polarity.	Setting for sampling clock dividing ratio = 1 to 4294967295 Setting for clock source and polarity: Clock source = INTernal, EXTernal. Polarity = NEGative, POSitive	1600 INTernal POSitive
:TRIGger :SOURce :MODE	Trigger source Trigger mode	Setting for Trigger source(BUS, INTernal, EXTernal, BOTH) Setting for Outside/Inside Trigger mode (NEGative, POSitive, LOW, HIGH, INNER, OUTER, INTO, OUTTHRUST)	BUS NEGative
:LEVel	Trigger level-1, Trigger level-2	In case Trigger source is INTernal, Trigger level-1 and Trigger level-2 = 0 to 255	0,0
:AD :STARt	CH name, numbers of Data Command	Allocation for Channel name and numbers of Data Command = ENable, DISable	no allocation DISable

***ADM-828GP appearance**



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