

Aptus Automation

Process Indicator **A1107**

User Manual

Notice before start-up

Please confirm the specification of instrument is to totally with your requirement before using it, also read this manual in detail.



Danger

Danger! Electric Shock! DON'T touch AC power wiring terminals when instrument has been powered!
Keep the power off until all of the wirings are completed!



Warning

- 1) Please confirm the AC power wiring to instrument is correct, otherwise it would be caused aggravated damage on instrument.
- 2) Be sure to use the rated power supply, otherwise it would be caused aggravated damage on instrument.
- 3) Please confirm wires are connected with correct terminal (Power, Input and Output).
- 4) Avoid installing instrument in following spaces:
 - I. A place where the ambient temperature may reach beyond the range from 0 to 50°C
 - II. A place where the ambient humidity may reach beyond the range from 20 to 90% RH.
 - III. A place where the instrument likely to come into contact with water, oil, chemicals, steam and vapor.

IV. A place where the instrument is subject to interface with static electricity, magnetism and noise.

- 5) For input signal, use low resistance shield cable.

TECHNICAL SPECIFICATIONS

Product Name	:	Process Indicator
Model No.	:	A1107
Input	:	Analog Signals 0 - 10 V DC 0 - 5 V DC 1 - 5 V DC 0 - 20 mA 4 - 20 mA
Range	:	-999 to 9999
Resolution	:	Selectable 0.001 to 1 count
Accuracy	:	Better than $\pm 0.5\%$ of Full Scale ± 2 count
Features through Keyboard	:	Three Keys on the front panel, High and Low Range Settings, Input Signal Selection, Decimal Point Selection, Offset, Correction Factor and Filter Setting
Power Supply	:	230VAC, 50Hz
Display	:	4 Digits RED

TERMINAL DETAIL A1107B-F (48x96)

MODEL: A1107B-F									
230 V AC							VDC	COM	mA
L	N						+	-	+
11	12	13	14	15	16	17	18	19	20

INPUT TYPE	A1107B-F
230 V AC Power supply	Terminal 11 & 12
0 - 20 or 4 - 20 mA	Terminal 20 (+Ve) & 19(-Ve)
0 - 10, 0 - 5 or 1 - 5 V DC	Terminal 18 (+Ve) & 19(-Ve)

TERMINAL DETAIL A1107-A (96x96)

MODEL: A1107-A									
230 V AC							INPUT		
L	N						VDC	COM	mA
+	-						+	-	+
1	2	3	4	5	6	7	8	9	10

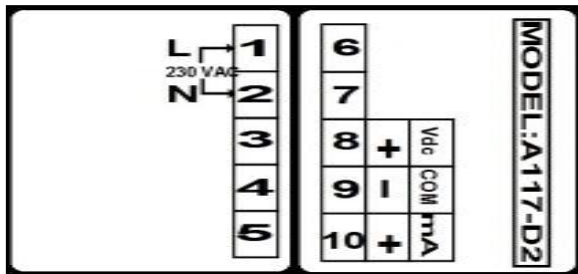
INPUT TYPE	A1107-A
230 V AC Power supply	Terminal 1 & 2
0 - 20 or 4 - 20 mA	Terminal 10 (+Ve) & 9(-Ve)
0 - 10, 0 - 5 or 1 - 5 V DC	Terminal 8 (+Ve) & 9(-Ve)

TERMINAL DETAIL A1107-D(72x72)

MODEL: A1107-D									
							SUPPLY		
7	6	5	4	3	2	1	N	L	
							VDC	COM	mA
							+	-	+
8	9	10	11	12	13	14	12	13	14

INPUT TYPE	A1107-D
230 V AC Power supply	Terminal 1 & 2
0 - 20 or 4 - 20 mA	Terminal 14 (+Ve) & 13(-Ve)
0 - 10, 0 - 5 or 1 - 5 V DC	Terminal 12 (+Ve) & 13(-Ve)

TERMINAL DETAIL A1107-D2 (48x48)



INPUT TYPE	A1107-D2
230 V AC Power supply	Terminal 1 & 2
0 – 20 or 4 – 20 mA	Terminal 10 (+Ve) & 9(-Ve)
0 – 10, 0 – 5 or 1 – 5 V DC	Terminal 8 (+Ve) & 9(-Ve)

OPERATOR SETTING MENU (LEVEL -1)

KEY	DISPLAY	FUNCTION
POWER ON	0-10	Initialization of the controller. Shows type i/p sensor type.
	Process Value	The display shows process value corresponds to input or 'IPLO' if process value is below lower range or 'IPHI' if process value is above higher range.
SET	rnGL	Lower range parameter. Press the SET KEY to set this parameter.
	0000	This is the Range Low parameter for display PV scaling. Setting range = -999 to (rnGH – 1).
SET	rnGH	Higher range parameter. Press the SET KEY to set this parameter.
SET	1000	This is the Range High parameter for display PV scaling. Setting range = (rnGL + 1) to 9999.
SET	dP	Decimal Position. Press the SET KEY to set this parameter.
SET	9999	This is the decimal position parameter for PV display. Options are : 9999 / 999.9 / 99.99 / 9.999

PARAMETER SETTING MENU (LEVEL -2)

To enter to Parameter setting menu, press Increment (▲) and Decrement (▼) keys together for more than 5 seconds.
All settings to be done using Increment (▲) and Decrement (▼) keys.

KEY	DISPLAY	FUNCTION
(▲) and (▼) keys together > 5 seconds.	PASS	Password. Press the SET KEY to set this parameter.
SET	0000	Set the password 808 and press SET KEY to go into configuration menu.
SET	InPt	Input signal selection. Press the SET KEY to set this parameter.
SET	0-10	Input signal options are as follows: - 0-10 = 0 to 10VDC Input 1-5 = 1 to 5VDC Input 4-20 = 4 to 20mA Input 0-5 = 0 to 5 VDC Input 0-20 = 0 to 20mA Input
SET	OFSt	Offset counts. Press the SET KEY to set this parameter.
SET	0	Set the offset value which directly add to or subtract from display reading. Setting range = -999 to 999 counts.
SET	COrr	Input correction factor. Press the SET KEY to set this parameter.
SET	0	Linear percentage of Correction Factor adds to or subtract from display reading. Setting range = -999 to 999 counts.
SET	FLtr	Filter time. Press the SET KEY to set this parameter.
SET	1	Set the filter time value. Setting range = 0 to 10 Seconds.
SET	SLL	Input signal low level. Press the SET KEY to set this parameter.
SET	3.5	Input signal low level indication (IPLO) for 4 to 20mA Input only. Below set mA, display shows IPLO message and Above set mA display shows process value. Setting range = 0.1 to 5.0 mA.
SET	rnGH	Higher range. Press the SET KEY to set this parameter.
SET	1000	Higher range used for display scaling. Setting range = (rngl + 1) to 9999.
SET	rnGL	Lower range. Press the SET KEY to set this parameter.
SET	0000	Lower range used for display scaling. Setting range = -999 to (rngh - 1).
SET	dP	Decimal Position. Press the SET KEY to set this parameter.
SET	9999	This is the decimal position parameter for PV display. Options are : 9999 / 999.9 / 99.99 / 9.999
SET	EP1	EP 1. Press the SET KEY to set this parameter.
SET	YES	*EP1 = NO : 'rnGH' Parameter hide from Operator setting menu. EP1 = YES : 'rnGH' Parameter shows in Operator setting menu.
SET	EP2	EP 2. Press the SET KEY to set this parameter.
SET	YES	*EP2 = NO : 'rnGL' Parameter hide from Operator setting menu. EP2 = YES : 'rnGL' Parameter shows in Operator setting menu.
SET	EP3	EP 3. Press the SET KEY to set this parameter.
SET	YES	*EP3 = NO : 'dp' Parameter hide from Operator setting menu. EP3 = YES : 'dp' Parameter shows in Operator setting menu.
SET	Process Value	The instrument come out of parameter setting mode and display process value corresponds to input feed.

* If EP1 = 0, parameters 'EP2' & 'EP3' hide from parameter setting menu and parameters 'rnGH', 'rnGL' & 'dp' hide from operator setting menu.

DISPLAY MESSAGES

DISPLAY	DESCRIPTION
IPLO	Input signal below lower range setting
IPHI	Input Signal higher than higher range setting