

GENERAL

Digital panel meters are used in many automation and process control applications for industrial monitoring and control, with the features of high precision, good stability, direct reading, strong anti-interference ability, nice appearance and easy to install. It is important to monitor and control variables such as current, voltage, power, frequency, etc. A digital panel meter can perform these functions and more. Dixsen offers a complete range of digital panel meter from very basic indicators with no output (DB Series) to more complex types with inputs and outputs or alarm function (DX Series). With its modular design, the DX series offers great flexibility by providing input or output combinations.

• REFERENCE STANDARDS

IEC51, IEC359, IEC348

CASING

High grade heat-resistance engineering plastic ABS material to support the casing.

PROTECTION GRADE

Under normal operation, the instrument cases have a protection grade of IP54.

OPERATING ENVIRONMENT

Places free of gas corruption with temperature of -10 °C \sim + 50 °C, and relative humidity \leq 85 % RH

ACCURACY INDEX

All Digital instruments accuracy index is 0.5, Digital instruments do not contain moving parts, so the accuracy is unaffected by the mounting position.

AUXILIARY POWER SUPPLY

AC220V \pm 10%, 50/60Hz, 110V or 380V option (Special voltage upon client's request)

MODE OF DISPLAY

There are two modes of display for our digital instruments:

1. Ultra bright red nixietube and Light Emitting Diode (LED) annunciator lamps. (Green nixietube and LED option)

Display mode of DB series: 3 1/2 bits LED and nixietube, Max. 1999 Display mode of DX series: 4 bits LED and nixietube, Max. 9999 (except DX-L96)

2. Liquid Crystal Display (LCD screen), LCD screen is illuminated by blue light which make user comfortable. (Only DX-L96)

ACCESSORY

- 1. Two clamping kits for flush mounting, user can complete the installment easily without tool.
- 2. A complete operating instruction manual included with each meter.







DIMENSION

Frame Dime	ension(mm)	(Case Dimension(mm)	Hole Cutout Dimension(mm)		
Width	Height	Width	Height	Depth	Width	Height
96	96	91	91	80	92	92
72	72	67	67	80	68	68
96	48	90	44	100	92	45
48	48	44	44	100	45	45

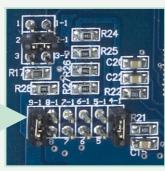
www.dixsen.com E-01



Economic Digital Panel Meter DB Series







Connection View

Inner View (Short-circuit cap)

Through change the position of short-circuit cap on the contact pin, the user can select any one of standard current transformer ratios in the range 5A to 2000A which are preprogrammed in the instrument. (Dixsen offer two categories of selectable CT ratios which shown below tables).

Category 1 selectable CT ratio

2	2000/5A	800/5A	150/5A	40/5A
	1600/5A	500/5A	120/5A	20/5A
i	1500/5A	400/5A	100/5A	15/5A
	1200/5A	200/5A	80/5A	10/5A
1	1000/5A	160/5A	50/5A	5A

Category 2 selectable CT ratio

1500/5A	600/5A	120/5A	50/5A
1200/5A	500/5A	90/5A	30/5A
900/5A	300/5A	75/5A	15/5A
750/5A	150/5A	60/5A	5A

Ref.	Model	Frame Size(mm)	Mode	Display Range	Class Index	Case Qty.(Pcs)	Item Code		
DB-A96	CT operated AC Ammeter								
DB-A90	DB-A96	96x96	x/5A*	0~1999A	0.5	36	2900000		
Dixsen	DB-A72	72x72	x/5A*	0~1999A	0.5	36	2700000		
BABB	DB-A94	96x48	x/5A*	0~1999A	0.5	45	2400000		
A A	DB-A48	48x48	x/5A*	0~1999A	0.5	48	2800000		

^{*}X/1A upon request, (x/1A selectable CT ratio is not available, only fixed CT ratio available).

Ref.	Model	Frame Size(mm)	Mode	Display Range	Class Index	Case Qty.(Pcs)	Item Code
	Direct input AC	Voltmeter					
DB-V96	DB-V96	96x96	-	0~600V	0.5	36	4496000
	DB-V72	72x72	-	0~600V	0.5	36	4472000
Dixsen	DB-V94	96x48	-	0~600V	0.5	45	4494000
¥.	DB-V48	48x48	-	0~600V	0.5	48	4448000

DB-F96



Frequency Meter

DB-F96	96x96	-	30~100.0Hz	0.5	36	4596000
DB-F72	72x72	-	30~100.0Hz	0.5	36	4572000
DB-F94	96x48	-	30~100.0Hz	0.5	45	4594000
DB-F48	48x48	-	30~100.0Hz	0.5	48	4548000

Note: Voltage supply 30~500VAC.

DB-PF96S



Power Factor Meter

DB-PF96S	96x96	1P	L0~1.0~C0	0.5	36	4691000
DB-PF96T	96x96	3P	L0~1.0~C0	0.5	36	4693000
DB-PF72S	72x72	1P	L0~1.0~C0	0.5	36	4671000
DB-PF72T	72x72	3P	L0~1.0~C0	0.5	36	4673000
DB-PF94S	96x48	1P	L0~1.0~C0	0.5	45	4641000
DB-PF94T	96x48	3P	L0~1.0~C0	0.5	45	4643000

Note: Please mention Volts and Amps when ordering.

DB-P96S



Power Meter

DB-P96S	96x96	1P	0~9999*	0.5	36	4791000
DB-P96T	96x96	3P3W	0~9999*	0.5	36	4793000
DB-P96F	96x96	3P4W	0~9999*	0.5	36	4794000
DB-P72S	72x72	1P	0~9999*	0.5	36	4771000
DB-P72T	72x72	3P3W	0~9999*	0.5	36	4773000
DB-P72F	72x72	3P4W	0~9999*	0.5	36	4774000
DB-P94S	96x48	1P	0~9999*	0.5	45	4741000
DB-P94T	96x48	3P3W	0~9999*	0.5	45	4743000
DB-P94F	96x48	3P4W	0~9999*	0.5	45	4744000

Note: Please mention Volts and Amps when ordering.
Ratio can be setted via buttons on the panel.
*MW,W,KW can be provided.

• SELECTION OF THE PROGRAMMABLE DIGITAL METER

DX Series is a universal programmable digital instrument that has been developed to meet the most advanced application requirements. With features of parameter programming and outputs, and alarm function.

• PROGRAMMING FUNCTION

The programming function can be easily realized via front panel key switches. Annunciator: to indicate the setpoint status of programmed parameters.

ALARM FUNCTION

Higher and lower limit alarm displaying character "HHHHH" or "LLLL". Alarm time can be set from 0 second to 60 second, and Alam limit (High and Low limit value can be setted by user)

Ref.	Model	Frame Size(mm)	Mode	Display Range	Class Index	Case Qty.(Pcs)	Item Code
DV 104	CT operated A	C Ammeter					
DX-A96	DX-A96	96x96	x/5A*	0~9999A	0.5	36	4890000
Dixsen	DX-A72	72x72	x/5A*	0~9999A	0.5	36	4870000
	DX-A94	96X48	x/5A*	0~9999A	0.5	45	4840000
₽	DX-A48	48X48	x/5A*	0~9999A	0.5	48	4880000
Set							

^{*} Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

DX-A96R



AC Ammeter with Alarm output

Direct input AC Voltmeter

DX-A96R	96x96	x/5A*	0~9999A	0.5	36	4990000
DX-A72R	72x72	x/5A*	0~9999A	0.5	36	4970000
DX-A94R	96X48	x/5A*	0~9999A	0.5	45	4940000
DX-A48R	48X48	x/5A*	0~9999A	0.5	48	4980000

^{*} Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

DX-V96



DX-V96	96x96	-	0~600V	0.5	36	5096000
DX-V72	72x72	-	0~600V	0.5	36	5072000
DX-V94	96X48	-	0~600V	0.5	45	5094000
DX-V48	48X48	-	0~600V	0.5	48	5048000

Note: Buttons on the panel are non-functional.

DX-V96R



Direct input AC Voltmeter with Alarm output

DX-V96R	96x96	-	0~600V	0.5	36	5196000
DX-V72R	72x72	-	0~600V	0.5	36	5172000
DX-V94R	96X48	-	0~600V	0.5	45	5194000
DX-V48R	48X48	-	0~600V	0.5	48	5148000

Note: Buttons on the panel are non-functional.

• COMBINATION PROGRAMMABLE DIGITAL INSTRUMENTS

Combination programmable digital instruments are advanced panel meter capable of simultaneously displaying independent variables, making three instruments (at least) in one. This solution allows the user to save panel space and reduce wiring and assemble labor, maximize panel space. Normally, In 3-phase AC power systems. Combination programmable digital instruments can replace several conventional meters.

Ref.	Model	Frame Size(mm)	Mode	Display Range	Class Index	Case Qty.(Pcs)	Item Code
DX-Z9613	Combination r	eading for 3 Cur	rent (3Phase Pu	rpose)			
DA-29013	DX-Z9613	96X96	x/5A	0~9999A	0.5	36	5290000
Dixsen	DX-Z72I3	72X72	x/5A	0~9999A	0.5	36	5270000
A CIPER A	DX-Z48I3	48X48	x/5A	0~9999A	0.5	36	5280000

* Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

DX-Z96U3



Combination reading for 3 Voltage (3P3W & 3P4W Purpose)

DX-Z96U3	96X96	-	0~600V	0.5	36	5396000
DX-Z72U3	72X72	-	0~600V	0.5	36	5372000
DX-Z48U3	48X48	-	0~600V	0.5	36	5348000

Note:Buttons on the panel is non-functional.

DX-Z96UIF



Combination reading for Voltage-Current-Frequency (1Phase Purpose)

	•		• •	• •		
DX-Z96UIF	96X96	-	-	0.5	36	5496000
DX-Z72UIF	72X72	-	-	0.5	36	5472000
DX-Z48UIF	48X48	-	-	0.5	36	5448000

* Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

DX-Z96UIP



Combination reading for Voltage-Current-Power (1Phase Purpose)

DX-Z96UIP	96X96	-	-	0.5	36	5596000

Note: Please mention volts and Amps when Ordering. Ratio can be setted via buttons on the panel.

*AAAA AA KAA

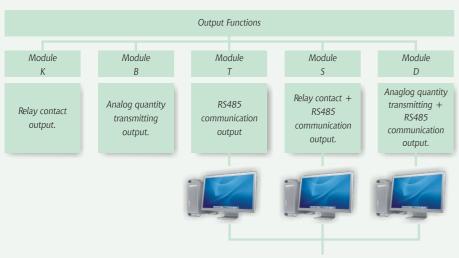
*MW,W,KW can be provided.

* Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

E-04 www.dixsen.com www.dixsen.com E-05

OUTPUT FUNCTION

Possibility to expand the outputs only when really needed by the application. Flexible output module make this meter is the right choice for many applications. 5 types of outputs available to Multi-Function network power instrument.



Via the RS485 interface, the instrument is connectable with a computer, programmable operation display and PLC.

Ref.	Model	Frame Size(mm)	Mode	Class Index	Case Qty.(Pcs)	Item Code				
Combination reading for Current-Voltage (3P4W Purpose)										
DX-Z96IU	DX-Z96IU	96X96	_*	0.5	36	5696000				

* Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

Combination reading for Current-Voltage-Frequency (3P4W Purpose)

DX-Z96TIUF	96X96	_*	0.5	36	5796000
------------	-------	----	-----	----	---------

^{*} Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

Combination reading for Current-Voltage-Frequency-Power Factor (3P4W Purpose)

DX-Z96IUHF	96X96	-	0.5	36	5890000

^{*} Mode X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

Combination reading for Current-Voltage-Frequency-Power Factor with Output module (3P4W Purpose)

DX-Z96K-IUHF	96X96	-*1	0.5	36	5891000
DX-Z96B-IUHF	96X96	-*2	0.5	36	5892000
DX-Z96T-IUHF	96X96	-*3	0.5	36	5893000
DX-Z96S-IUHF	96X96	-*4	0.5	36	5894000
DX-Z96D-IUHF	96X96	-*5	0.5	36	5895000

^{*1-5} Mode with output module (K & B & S & T & D) are provided respectively, also X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

• SELECTION OF MULTI-FUNCTIONAL NETWORK POWER ANALYZER

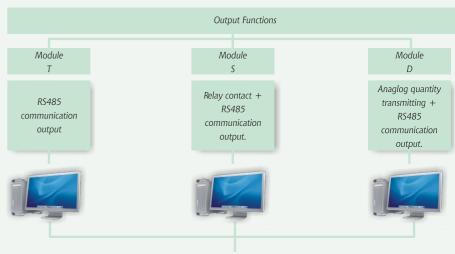
This series meter has all the functions of DX series digital programmable meters. It can measure almost more than 30 electrical parameters including of three-phase voltage, three-phase current, active power, reactive power, apparent power, frequency, power factor and 4-quadrant energy etc; It displays through 3-row 4-digit or 2-row 6-digit LED nixietubes or LCD screen. iT is added with keyboard parameters such as alarm and transmitting output object, alam delay time, display object and cycle display time and 2-channel electric energy pulse outputs, 4-channel switching value input. The alam (or switching value) output and transmitting output can enlarge to four channels. In this way it allows to watch measured 10 information at the same time. obtain to read measurement values easly For practical using and understandable. Parameters are displayed on a 4-line backlit LCD display, with optional serial communication available. Programming of parameters is easily effected by means of the buttons on the front of the instrument.

• VARIOUS INPUT CAPABILITIES

Current, Voltage, Frequency, Active power, Reactive power, Cos inductive and capacitive Energy consumption.

OUTPUT FUNCTION

Possibility to expand the outputs only when really needed by the application. Flexible output module make this meter is the right choice for many applications. 3 types of outputs available to Multi-Function network power instrument.



Via the RS485 interface, the instrument is connectable with a computer, programmable operation display and PLC.

Model	Frame Size(mm)	Mode	Class Index	Case Qty.(Pcs)	Item Code
Multi-Functional	Network Power Ana	alyzer			
DX-E96T	96X96	-* ¹	0.5	36	5990000
DX-E96S	96X96	-* ²	0.5	36	5991000
DX-E96D	96X96	_* ³	0.5	36	5992000

 $^{*^{1-3}}$ Mode with output module (S & T & D) are provided respectively, also X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

LCD display Multi-Functional Network Power Analyzer

		•			
DX-L96T	96X96	-*1	0.5	36	6090000
DX-L96S	96X96	-* ²	0.5	36	6091000
DX-L96D	96X96	_*3	0.5	36	6092000

^{*&}lt;sup>1-3</sup> Mode with output module (S & T & D) are provided respectively, also X/1A can be setted via buttons on the panel, also current ratio can be programmed any value which in the display range.

DX-796IUHF

DX-Z96TIUF



DX-Z96K-IUHF



E-06 www.dixsen.com www.dixsen.com

Ref.

DX-E96T

DX-196T

⁽A)