



### NICXs-100

“New Generation of Basic Models Panel Meters”



### DESCRIPTION

#### NICXs-100 Series

The NICXs-100 Digital basic element Measuring devices generally converts the analog signal into digital and display the voltage to measure as discrete numerical instead of pointer deflection, on the digital displays. NICXs-100 series can be used to measure AC voltage, Current, frequency as well as power parameters (kW, kVA, kVAr).

The Digital 100 Series basic model meters convert the quantity into the proportional signals and the signal Conditions circuit brings the signals into proper limits. which can be easily measure by the NICXs-100 Series. Digital Voltmeter, Ammeter, VAF and Power meter.

No	Model	Type
1	100	Voltmeter
2	110	Ammeter
3	120	VAF
4	130	POWER

### Optional Add On Models

Communication - Rs485

Max 2 Digital Outputs

### Applications

- ▶ Metering of distribution feeders, transformers, Generators
- ▶ Diesel Generator Panel
- ▶ Medium and low voltage systems
- ▶ Commercial, Industrial, utility
- ▶ Automation Control and PLC Applications
- ▶ Ac and Compressor Load
- ▶ Laboratory and Test Bench

The NICXs Digital Panel Meters reduces the Human readings and Interpolates Errors and Parallel Errors

# NICXS-100 Series Meters

CATEGORY	Description	Parameters	NICXS-100	NICXS-110	NICXS-120	NICXS-130	
Metering	Phase Voltage	V1, V2, V3, Vlnavg	■		■	■	
	Line Voltage	V12, V23, V31, Vll avg	■		■	■	
	Frequency	F	■		■	■	
	Line Current	I1, I2, I3, In, I avg		■	■	■	
	Power	P1,P2,P3,Psum				■	
	Apparent Power	S1,S2,S3,Ssum				■	
	Reactive Power	Q1,Q2,Q3,Qsum				■	
	Power Factor	PF1,PF2,PF3,PF				■	
	Additional Features	Default Features	Run Hours	V	I	█	
		Operating Hours	Aux Power Supply is on >85 V	█			
Power Interruption		Aux Power Supply is Off <85 V	█				
Events (Min/Max)		Real time Parameters	█				
Digital Output		Over/Under Limit	○	○	○	○	
Option Module	Communication	RS485 Module	Additional MODBUS RTU	○	○	○	○

Function
  Default
  Option
  Blank-NA

## Salient Features

- ▶ High accuracy - class 1 as per IEC 62053-21
- ▶ Selectable wiring configurations including 3-wire Delta and 4-wire Star
- ▶ CT secondary setting of 1A or 5A
- ▶ Complete PT and CT ratio programming on site.
- ▶ Universal power supply – accepts 83-265V AC or 110-300V DC on the same
- ▶ Due to digital display ,the human readings errors interpolates errors and parallel errors are reduce
- ▶ Digital meters can be program and well suitable for HT and LT panels Due to small compact
- ▶ Digital Meters can be programable and well suitable for HT & Lt Panels
- ▶ Due to small Standard Panel Size 92x 92x85 MM and Portable
- ▶ Suitable Measurement of quantities Voltage, Current, Frequency and Power parameters.
- ▶ The digital readout of the instruments 1 Line/3 Line 7 Segment display. Password facility

## Display

Display 1/3 Row 4 Digits 7 Segments Display  
 Display 4 Row 4 Digits 7 Segments Display  
 Digit Height 0.44”

# Specifications

METERING			
Parameters	Accuracy	Resolution	Range
	Class 1.0		
Voltage	0.2 %	0.1V	20 V - 999.9 MVA
Current	0.5%	0.1 mA	10 mA - 9999 A
Power	1%	1w	0- 99.99Mw
Reactive Power	1%	1Var	0- 99.99MVAr
Apparent Power	1%	1VA	0-99.99MVA
Power Factor	1%	0.001	Lag- Unity- Lead
Frequency	0.2%	0.01 Hz	45.00 -65.00 Hz

## Inputs

### Voltage Inputs(Each Channel)

System	Three Phase 3 wire or 4 wire Unbalanced
Nominal Full Scale	400Vac L-N, 690Vac L-L(+20%)
Isolation	2500Vac,50/60hz for 1 minute
Input Impedance	2Mohm per phase
Metering Frequency	45Hz - 65Hz
Pickup Voltage	20Vac

### Current Inputs(Each Channel)

Nominal Current	5A/1A
Metering Range	10mA - 10A ac
Withstand	20Arms continuous,100Arms for 1 second, non-recurring
Burden	0.05VA(typical)@5Arms
Pickup Current	10 mA

## OPERATING ENVIRONMENT

Operation Temperature - 25 °C to 70 °C  
 Storage Temperature - 40 °C to 85 °C  
 Relative Humidity 5% to 95% non- condensing

## COMMUNICATION

RS-485(Standard)  
 MODBUS RTU Protocol,2-Wire Connection  
 9600-38400 baud rate

## Power Supply

Universal AC or DC

### AC/DC AUXILIARY POWER

Operating Range	85-265 Vac,50/60Hz; 100-370Vdc
Burden	5W
No Load Input Power	<400mW
Frequency	47-440 Hz
Isolation	4000Vac,45/65Hz for 1minute
Installation Category	III(Distribution)

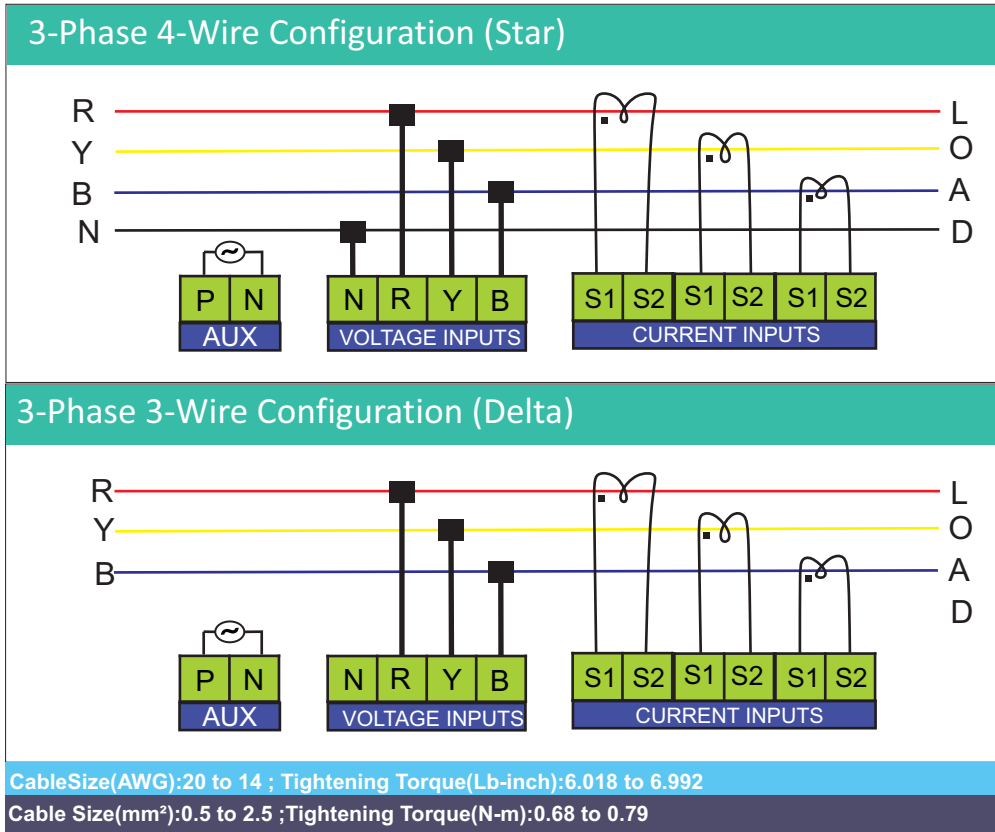
## Digital Output Option

Digital Output(DO)	
Voltage Range	0-400 Vac/dc
Load Current	100mA(Max)
Output Ton+Toff	10ms ON, 10ms OFF
Isolation Voltage	5000Vac

## Standard Compliance

Measurement Standard IEC 62053-22  
 Environmental Standard IEC 60068-2  
 Safety Standard IEC 61010-1, UL 61010-1  
 EMC Standard IEC 61000-4/-2-3-4-5-6-8-11

# Typical Wiring Configuration



## Dimensions

