



# TECHNICAL DATASHEET

**PRODUCT NAME**  
Jumbo Digital Counter

**PRODUCT CODE**  
ECXX-YD

**CATEGORY**  
Digital Instruments



## FEATURES

- Supports Potential Free Contact, PNP, NPN sensors, and DC Pulse inputs.
- Customizable debounce time (0 to 100 ms) and minimum time between counts (0 to 10 minutes).
- Compatible with 12-24V DC signals.
- Over-voltage and reverse polarity protection.
- 1000 V AC isolation between input and internal circuitry.

## APPLICATIONS

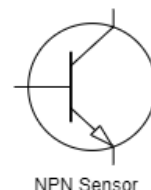
- Manufacturing and production lines
- Packaging Industries
- Automated Testing
- Utilities and services

## PRODUCT DESCRIPTION

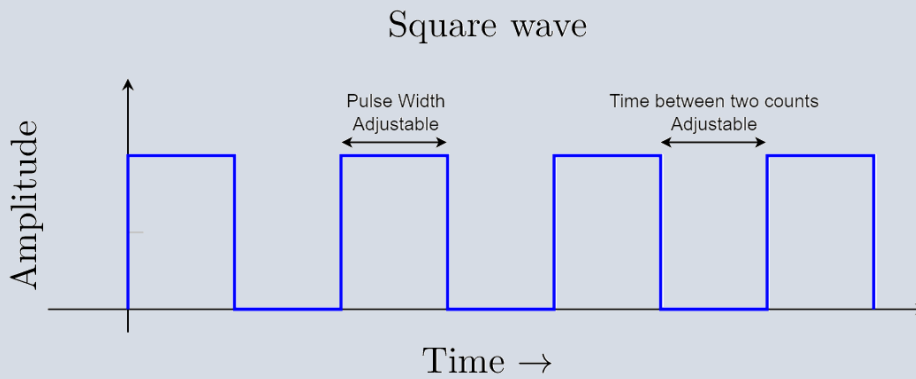
The Digital Electronic Counter is a versatile and reliable counting solution for various industrial and commercial applications. It supports multiple input types, including Potential Free Contact, PNP, NPN sensors, and DC Pulse, ensuring wide compatibility.

With adjustable debounce time and minimum time between counts, it offers precise counting for both high-speed and low-speed operations. Available in display sizes of 2, 4, 6, 8, and 12 inches and digit configurations of 4, 5, 6, 7, and 8 digits, it guarantees clear visibility in diverse settings.

## MULTIPLE INPUTS TYPES SUPPORTED



## ADJUSTABLE INPUT SIGNAL



## COMPLIANCE CERTIFICATION



## DISPLAY SELECTION METHOD

By Viewing Distance

VIEWING DISTANCE	DISPLAY HEIGHT	
4 m	0.5 Inch	12 mm
8 m	1 Inch	25 mm
20 m	2 Inch	50 mm
50 m	4 Inch	100 mm
100 m	6 Inch	150 mm
125 m	8 Inch	200 mm
200 m	12 Inch	300 mm

Table 1

By Area / Environment

DISPLAY TYPE	USE CASE
FnD Display	Indoor
DoT LED Display	Outdoor. Day Visibility in direct sunlight
P10 Matrix Display	Outdoor. Viewing distance over 200 meters

Table 2



FnD Display



Dot LED Display

## TECHNICAL SPECIFICATIONS

### DISPLAY AND KEYS

Model	ECxx-3D	ECxx-4D	ECxx-5D	ECxx-6D	ECxx-7D	ECxx-8D
Digits	3	4	5	6	7	8
Range	0-999	0-9,999	0-99,999	0 – 9,99,999	0 – 99,99,999	0 – 9,99,99,999
Display Color	Red					
Display Type	Refer Table					
Display Height	Refer Table					
Viewing Distance	Refer Table					
Keys	K1, K2, K3, K4					

All specifications are subject to change without notice due to continuous improvement.

ELECTROMED  
You Think... We Display

P : +91 9415085804  
E : info@electromed.co.in  
W : https://electromed.co.in

D-17, Vivekanand Puri,  
Lucknow,  
Uttar Pradesh, India  
Pincode: 226007

# TECHNICAL SPECIFICATIONS

INPUT				
Type	Potential Free Contact	PNP Sensors	NPN Sensors	DC Pulse
Input Voltage	0V (open) 12-24 V (closed)	12-24V DC	0V(low) 12-24V DC (high)	12-24V DC
Input Current	<5 mA	<10 mA	<10 mA	<10 mA
Input Configuration	Dry Contact	Open Collector Sourcing	Open Collector Sinking	Square Wave or Sine wave
Input frequency	1 Hz (maximum)			
Input Pulse width	Adjustable : 50 ms to 1 ms			
Debounce Time	Adjustable : 0 to 1000 ms			
Accuracy	1 Digit			
Minimum Time Between Counts	Adjustable : 0 to 600 seconds			
Sampling Rate	4 Samples / Sec			
Input impedance	10 kΩ			
Max Voltage	20 VDC			
Range	Refer Table			
Isolation Voltage	1000 VAC for 1 minute (b/w input and internal circuitary )			
Response Time	< 1 ms			
Over- voltage Protection	Upto 30 VDC			
Reverse Polarity Protection	Yes (for PNP/ NPN/ DC Pulse inputs )			
Input Status Indication	LED Indicators for each inputs			
Wiring Diagram	Provided in user manual			

PHYSICAL	
Enclosure	IP54 , Upgradable to IP65
Mounting	Refer Table
Dimensions	Refer Table
Panel Cut out	Refer Table
Weight	Refer Table
Enclosure	MS Power Coated
Terminal Cable Size	2.5 mm sq.

OUTPUT (OPTIONAL)	
Interface	RS485 (2 Wire)
Protocol	Modbus-RTU
Baudrate	9600
Stop Bits	1
Parity	None
Data Bits	8
Data Type	32 Bit Unsigned Integer

POWER SUPPLY	
Supply Voltage	85-265VAC
Power consumption	Refer Table 11,12
Transmitter Power Supply (Optional)	24VDC (±10%) @50mA

CONNECTORS TERMINAL	
Connection Type	Screw Terminal
Power Connection	Live , Neutral , Earth
Power Supply TB Type	3 Pin Barrier Terminal
Signal Connector	Relay Contacts : COM , NO, NC
Power Supply TB Type	2 Pin Barrier Terminal

ENVIRONMENTAL	
Operating Temperature	0-55 °C
Storage Temperature	0-80 °C
Humidity	20-95% RH non-condensing

# MODEL WISE SPECIFICATIONS

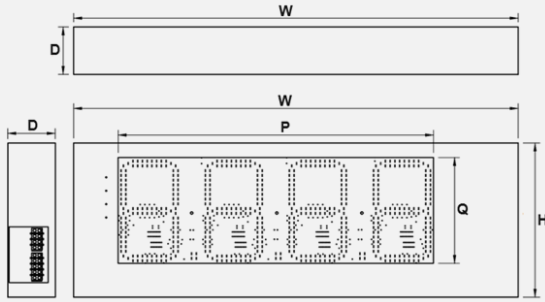


Figure 2: ECXX-4D

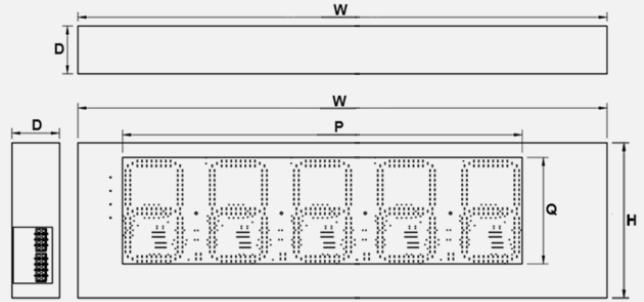


Figure 3: ECXX-5D

Model	Display Height	Display Type	Viewing Distance	Display Dimensions (P x Q) mm	Overall Dimensions (H x W x D) mm	Weight	Power Consumption
<b>4 Digit Counters</b>							
EC02-4D	2"	FnD	20 meter	200 x 70	144 x 288 x 160	2 kg	<3W
EC04-4D	4"	FnD	50 meter	370 x 125	190 x 460 x 80	3 kg	<4W
EC06-4D	6"	Dot LED	100 meter	525 x 175	260 x 750 x 80	4 kg	<12W
EC08-4D	8"	Dot LED	125 meter	590 x 205	280 x 800 x 80	5 kg	<14W
EC12-4D	12"	Dot LED	200 meter	920 x 310	480 x 1120 x 80	8 kg	<20W
<b>5 Digit Counters</b>							
EC02-5D	2"	FnD	20 meter	250 x 70	144 x 330 x 160	2.5 kg	<4W
EC04-5D	4"	FnD	50 meter	460 x 125	190 x 550 x 80	4 kg	<5W
EC06-5D	6"	Dot LED	100 meter	665 x 175	260 x 890 x 80	3 kg	<13W
EC08-5D	8"	Dot LED	125 meter	745x 205	280 x 955 x 80	6 kg	<18W
EC12-5D	12"	Dot LED	200 meter	1170 x 310	480 x 1370 x 80	10 kg	<25W
<b>6 Digit Counters</b>							
EC02-6D	2"	FnD	20 meter	300 x 70	144 x 380 x 160	3 kg	<3W
EC04-6D	4"	FnD	50 meter	550 x 125	190 x 640 x 80	4.5 kg	<6W
EC06-6D	6"	Dot LED	100 meter	805 x 175	260 x 1030 x 80	6 kg	<18W
EC08-6D	8"	Dot LED	125 meter	900 x 205	280 x 1110 x 80	7.5 kg	<21W
EC12-6D	12"	Dot LED	200 meter	1420 x 310	480 x 1620 x 80	12 kg	<30W
<b>7 Digit Counters</b>							
EC02-7D	2"	FnD	20 meter	400 x 70	144 x 480 x 160	3.5 kg	<6W
EC04-7D	4"	FnD	50 meter	730 x 125	190 x 820 x 80	3 kg	<7W
EC06-7D	6"	Dot LED	100 meter	1085 x 175	260 x 1310 x 80	7 kg	<21W
EC08-7D	8"	Dot LED	125 meter	1210 x 205	280 x 1420 x 80	9 kg	<23W
EC12-7D	12"	Dot LED	200 meter	1920 x 310	480 x 2120 x 80	14 kg	<35W
<b>8 Digit Counters</b>							
EC02-8D	2"	FnD	20 meter	450 x 70	144 x 530 x 160	4 kg	<6W
EC04-8D	4"	FnD	50 meter	820 x 125	144 x 910 x 80	6 kg	<8W
EC06-8D	6"	Dot LED	100 meter	1225 x 175	260 x 1450 x 80	8 kg	<24W
EC08-8D	8"	Dot LED	125 meter	1365 x 205	280 x 1575 x 80	10 kg	<28W
EC12-8D	12"	Dot LED	200 meter	2170 x 310	480 x 2370 x 80	18 kg	<40W

Table 11

All specifications are subject to change without notice due to continuous improvements.