



- **Safe & Simple Current Measurement**  
True rms or Mean Sensing
- **Quick to Install**  
No external CTs required
- **5mA to 300 Amp without CTs**
- **4 – 20mA or 0 – 5V<sub>dc</sub> Outputs**  
Process Control or Circuit Monitoring
- **Pulse Output**  
Metering for Energy management
- **High Overload withstand**

Probably the easiest and simplest devices for measuring current in virtually any application. Clip onto the rail, wire the secondary and pass the primary conductor through the hole in the transducer.

## Applications include:

### Current Measurement

Mean Sensing or True rms to choice

### Energy Management

Meter replacement where voltage & PF is stable or known

### Earth Leakage measurement

True rms from 5mA (XD-R420-0)

### Motor Control

ON / OFF and failure sensing

### Actuators

Operation / Failure

### Lamp Failure

Multiple lamps can be monitored with a single XD Transducer



**XD** Transducers are probably the simplest devices possible for measuring current or monitoring consumption:

- Clip onto a DIN Rail
- Pass the conductor through the hole
- Connect the output

For ultimate simplicity, the **V5** model is self powered.

For maximum flexibility, the **4-20mA** versions are available either Mean-sensing or true-rms.

The **XD-R0** low current model can be used for either simple current measurement or – if all the cores are passed through the aperture – as a core-balance **Earth Leakage** transducer.

Lower Currents can always be measured by passing two or more turns of the primary cable through the XD Transducer.

		<b>Available Models</b>			
<b>Current Range</b>		100mA to 1 Amp	5 Amp to 25 Amp	30 Amp to 100 Amp	100 Amp to 300 Amp
	<b>Max Cable <math>\phi</math></b>	19mm	10mm	19mm	19mm
<b>Output</b>	<b>Measurement</b>				
0 – 5 Vdc	Mean Sense		XD-V5-1	XD-V5-2	XD-V5-3
4 – 20mA	Mean Sense		XD-I420-1	XD-I420-2	XD-I420-3
4 – 20mA	True rms	XD-R420-0	XD-R420-1	XD-R420-2	XD-R420-3
Pulse Contact	True rms		XD-P-1	XD-P-2	

<b>User Selectable Current Range &amp; Supply Requirements</b>					
Type	100mA to 1 Amp	5 Amp to 30 Amp	15 Amp to 100 Amp	50 Amp to 300 Amp	Aux Supply
<b>XD-V</b> <b>XD-I</b>	N / A	5, 10, 15, 20, 25 & 30* A	15*, 30, 45, 60, 75 & 100A	50*, 100, 150, 200, 250 & 300* A	None 24V Loop
<b>XD-R</b>	100, 200, 500, 600 & 1000 mA	5, 10, 15, 20, 25 & 30A	20, 40, 60, 80 & 100 A	50*, 100, 150, 200, 250 & 300* A	24V Loop
<b>XD-P</b>	N / A	7.5A, 15A, 22.5A & 30A	30A, 60A, 90A & 120A	N / A	24V dc 10mA

## Brief Specification

<b>Input</b> XD-V5-1 XD-I-420-1 XD-V5-2 XD-I420-2 XD-V5-3 XD-I420-3 XD-R420-0 XD-R420-1 XD-R420-2 XD-R420-3 XD-P-1 XD-P-2	5, 10, 15, 20, 25 or 30* A 15*, 30, 45, 60, 75 or 100A 50*, 100, 150, 200, 250 or 300* A 100, 200, 500, 600 or 1000mA 5, 10, 15, 20, 25 or 30 A 20, 40, 60, 80 or 100A 50, 100, 150, 200, 250 or 300A 7.5, 15, 22.5 or 30A 30, 60, 90 or 120 A * At reduced accuracy	<b>Output Burden</b> XD-V5 XD-I420 & XD-R420	100k $\Omega$ min 250 $\Omega$ nominal, 600 $\Omega$ max
<b>Frequency Range</b> Standard	45Hz – 65Hz Standard	<b>Pulse Output</b> XD-P Rating Calibration	Isolated from dc supply, 50V max 50V ac or dc and 100mA max 230V at PF=1 1 $\mu$ s or 3 $\mu$ s, user selectable 100 or 1000 pulses/kWh
<b>Operating Range</b> XD-V and XD-P XD-I and XD-R	0 – 120% nominal FS Amp 0 – 100% nominal FS Amp	<b>Aux Supply</b> XD-V5 XD-I420 XD-R420 XD-P	None Loop 24Vdc (16 – 36V) Loop 24Vdc (16 – 36V) 24Vdc (16 – 36V) at 10mA max
<b>Overload</b> for 2 seconds Continuous		<b>Max Cable Diameter</b> -1 Models -0, -2 & -3 Models	10mm 19mm
<b>Output</b> XD-V5 XD-I420 XD-R420 XD-P	0 – 5V dc max ... V 4 – 20 mA max ...mA 4 – 20 mA max ...mA Volt –free contact	<b>Isolation</b> Input to Output	4kV 50Hz 1 sec test
<b>Response Time</b>	Less than 1 sec	<b>Dimensions</b>	95 x 52 x 32 mm 99 mm above & 52 mm along rail
<b>Accuracy</b> XD-V, XD-I & XD-R XD-P	Better than Class 1 EN 60688 Equiv to Class 1 EN 60253-11 and BS DD 8431	<b>Environmental</b> <b>Operating Temp Range</b> <b>Storage Temp Range</b> <b>Humidity</b> <b>Protection Category</b>	-10°C to + 65°C -40°C to + 85°C < 95% non-condensing IP50
<b>Crest Factor</b> XD-R Others		<b>Mounting</b> <b>Plate</b> <b>DIN Rail</b>	35 x 38 mm Fixing Centres TS35 DIN Rail (Clips supplied)