

# Watt Transducer WAT95



- High accuracy
- Long term stability
- Time-Division Multiplication principle

**Watt Transducers WAT95** are used to convert single or three phase unbalance load active power into a proportional load independent DC. Output. Based fully on electronic Time-Division Multiplication measuring principle, the true power of a network with any power factor range are linearly produced by Watt Transducer output.

Calibration watt of rated output

Connection	V = 110 V		V = 220 V		V = 380 V	
	I = 1 A	I = 5 A	I = 1 A	I = 5 A	I = 1 A	I = 5 A
Single Phase	100 W	500 W	200 W	1000 W	-	-
3 phase, 3 wire	200 W	1000 W	400 W	2000 W	600 W	3000 W
3 phase, 4 wire	200 W	1000 W	400 W	2000 W	600 W	3000 W

Note. V = Line voltage

Equation to calculated measuring range

Measuring range = Calibration watt x PT ratio x CT ratio

Example 3 phase, 3 wire, PT 220 V/110 V, CT 250/5 A, Calibration watt = 1000W

Measuring range = 1000 x 220/110 x 250/5 = 100 KW.

## Specifications

### Input

**Number of Channel:** 3 Channels

**Input Type:** Current, Voltage  
(1 phase, 3 phase 3 wire, 3 phase 4 wire)

### Input Range:

Current (1, 5 A)

Voltage (110, 220, 380 VAC (Line voltage for 3 phase))

### Power Consumption:

< 0.2 VA for input current

< 0.4 VA for voltage input

**Frequency:** 50 Hz.

**Linearity:** <  $\pm 0.5$  % of span

### Analog Output

**Number of Channel:** 1 Channel

**Output Type:** Current, Voltage

### Output Range:

Current Max 0 to 1 mA (Load Resistance 10 K $\Omega$ )

Current Max 4 to 20 mA (Load Resistance 600  $\Omega$ )

Voltage Min 0 to 10 mVDC (Load Resistance 500  $\Omega$ )

Voltage Min 0 to 100 mVDC (Load Resistance 500  $\Omega$ )

Voltage Min 0 to 1 VDC (Load Resistance 500  $\Omega$ )

Voltage Min 0 to 5 VDC (Load Resistance 1 K $\Omega$ )

Voltage Min 1 to 5 VDC (Load Resistance 1 K $\Omega$ )

Voltage Min 0 to 10 VDC (Load Resistance 2 K $\Omega$ )

### Power Requirements

**Power Supply:** 110, 220 VAC

### Environmental Limits

**Operating Temperature:** 0 to 55  $^{\circ}\text{C}$

**Operating Humidity:** 5 to 95% RH

**Storage Temperature:** 0 to 70  $^{\circ}\text{C}$

### Physical Characteristics

**Dimension:** W132 x H132 x D162 mm.

**Mounting:** Wall mount (Din Rail Optional)

**Wiring:** Screw terminals

### Warranty

**Warranty Period:** 5 Year

**Ordering Information:** Specify Connection, Input voltage, Input current, Output, Power supply

Example WAT95/3 phase 4 wire/380 VAC/5A/4-20 mA/220 VAC

### Package Checklist

1. WAT95.

**Wiring:**

