

# Model C7685 001 Microprocessor Conductivity Meter



- \* Displays nS or MΩ
- \* Ref Temp 10 25°C
- Look up Table for UPW Conductivity Vs Temp
- \* Auto Ranging
- \* Two Control Relays.
- One Alarm Relay.
- \* Isolated Current Output.
- **\*** User Friendly  $\mu$ P.

The model C7685-001 is a  $\mu P$  panel mounting Conductivity/Resistivity meter with the ability to display either nS or M $\Omega$  for the measurement of ultra pure water in industrial processes.

The temperature compensation when measuring the conductivity or resistivity of ultra pure water is critical. The temperature coefficient depends upon both the temperature and the conductivity of the water being measured. This is sometimes referred to as dual slope compensation.

With the power of the microprocessor and a stored reference table the conductivity or resistivity maybe displayed to any reference temperature from 10 - 25°C. Measuring ranges maybe selected from the following table or configured for auto ranging from the keypad.

Note 1000nS =  $1\mu$ S

The model C7685 Conductivity meter features cell constant( k) selection from k=0.01 to k=10.0

The model C7685-001 is the ultra pure water conductivity version of a range of user friendly microprocessor based



electrochemical instruments. Designed to provide reliable accurate and dependable measurement and control of many industrial process

Two programmable control relays are fitted, the control relays can be programmed for either high or low operation and have adjustable hysteresis and delay timers.

One adjustable alarm relay with delay timer is fitted which maybe set to operate on both a high and low measured value.

The isolated output corresponds to the measuring range selected and can be programmed for either 0 - 20 mA or 4 - 20 mA.

The 16 character alphanumeric LCD displays the measured parameter, temperature and provides information about the state of the control and alarm relays. Also accessible is an indication of the operating condition of the sensor, state of calibration, control points, alarm setting and analogue outputs.

.Installation of the 7685 series of instruments is intended to be into a control panel or in the optional IP65 weatherproof enclosure for all year round outside installation. The electronics are housed into an anodised aluminium case providing excellent EMC properties.

The rear of the case is fitted with two plug in connector blocks for ease of installation and maintenance.

### Ranges For C7685-001 Conductivity Meter

Measuring Ranges				
k	0.01	0.1	1.0	10.0
Range	200.0 nS	200. nS	2000 nS	20.00μS
0-	2000 nS	2000 nS	20.00μS	200.0μS
	20.00µS	20.00μS	200.0µS	2000μS
		200.0µS	2000μS	20.00mS

## **Specifications**

Input AWE Conductivity cell k=0.1 to 1.0 see table

Ranges see table

Temp range 0 to 100 °C

Temp comp/display. Automatic via Pt100 sensor

Base from 10 - 25°C.

C7685-001

Coefficient auto from lookup table

Display 16 character alphanumeric LCD.

Output 0 - 20mA / 4 - 20 mA programmable

into  $600~\Omega$ 

Set points 2 on/off high/low selectable.

5 amp non inductive.

Hysteresis  $\pm 10\%$  adjustable.

Alarm 1 min./max. or 0 - 60 mins activation of S1/2

Time delay 0 - 25 seconds adjustable.

Zero adjustable.  $\pm 10\%$ 

Slope 60 - 160%

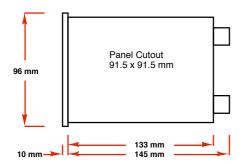
Mains supply 230/115 volt 50/60 Hz.

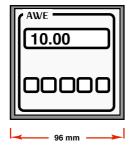
Power consumption 5 VA

Weight 850 grams DIN rail version

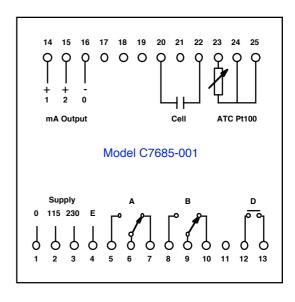
Dimensions 96 x 96 x 155 mm. cutout 91.5 x 91.5 mm.

## **Dimensions**





### **Connections**





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