

## TOC Monitor for pure water

## Transmitter Model TOC - 200

A resistivity meter monitors purity of ultrapure water by means of detecting ions in water, but is not able to sense impurities like organic matters not ionized in water.

This TOC Monitor is designed to detect the organic matters in water and is able to monitor the purity of ultrapure water continuously. This monitor is applied to pure water lines to check their purity and possibility of processing to re-use of them.

### Features

Simple system, compact size and at very affordable price.

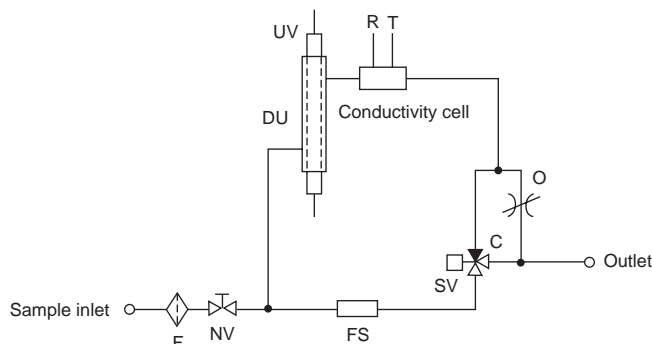
Outputs of TOC value and resistivity or conductivity enable a single instrument to monitor both impurities by organic matters as well as by ionized matters.

No reagents required.

### Measuring principle

Organic matters in the sample are oxidized by irradiation of UV in the presence of catalyst and form carbonate ions. Since the irradiation of UV is intermittently done, resistivity or conductivity of sample is alternately measured while UV is not irradiated or while is irradiated. TOC value is obtained on the gauge line as the cross point with difference value of resistivity or conductivity measured at both cases.

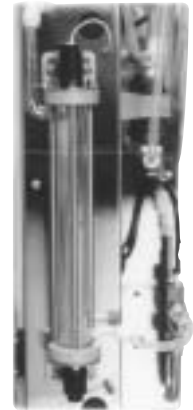
### Flow sheet



SYMBOL	DESCRIPTION
F	Filter
FS	Flow distributor
NV	Flow regulator
O	Orifice
DU	TiO <sub>2</sub> oxidizer
R	Resistivity sensor
SV	Stream shunt valve
T	Temp sensor
UV	UV lamp



Transmitter  
Model TOC - 200

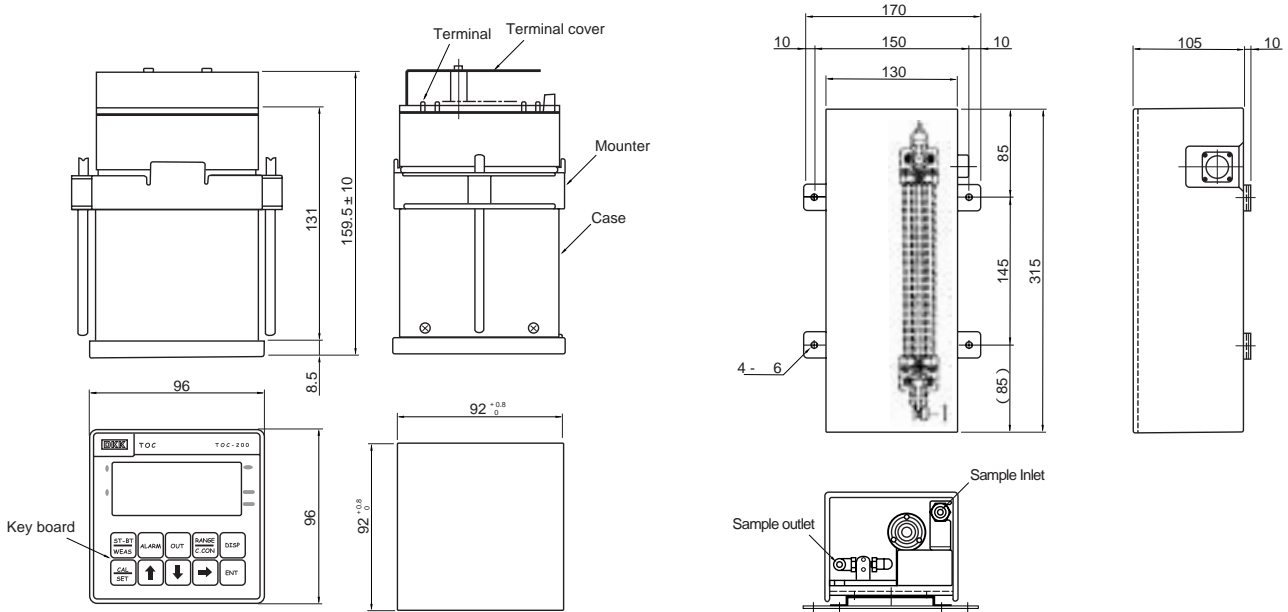


Sensor  
Model TO - 1

### Standard Specifications

Product name	: TOC Monitor for pure water
Model	: TOC - 200 ( Transmitter ) TO - 1 ( Sensor )
Measuring range	: 0 to 20 Cppb at R 10M · cm 0 to 200 Cppb at R 1 M · cm 0 to 2000 Cppb at R 0.1M · cm
Sample flow rate	: 100mL/min
Measuring cycle	: 2 to 5min. ( Adjustable )
Outputs	: 4 ~ 20mADC, Output range is adjustable. Channel - 1 for TOC value, Channel - 2 for resistivity or conductivity
Alarm outputs	: High alarm to TOC value, Fault alarm to Instrument Contacts cap. ; AC 250V1A
Power source	: 85 to 264VAC , 50/60Hz
Sensor cable	: 10m length ( max. 30m )

Outline dimensions in : mm



Product code

Transmitter of TOC Monitor

TOC200-0-□□□□	
1	Sensor cable length 10m
2	20m
3	30m
X	Others to be specified
	Mounting parts
A	Standard type provided
B	Nil
Z	Custom spec.
	RS-232C output
0	Nil
1	Supplied
	Markings
0	Standard ( Japanese )
1	English
	Provision of sensor
0	Provided together with transmitter
1	Nil

Sensor of TOC Monitor

TO1-0-□□□	
A	Mounting parts Standard type
B	Not equipped
Z	Custom spec.
	Markings
0	Japanese ( standard )
1	English
	Provision of transmitter
0	Provided together with sensor
1	Nil



DKK·TOA CORPORATION

Company DKK·TOA Corporation  
 Headquarters: 29-10,1-Chome,Takadanobaba,Shinjuku-ku,  
 Tokyo 169-8648 Japan  
 Tel : +81-3-3202-0211 Fax : +81-3-3202-0220

International DKK·TOA Corporation  
 Operations: 29-10,1-Chome,Takadanobaba,Shinjuku-ku,  
 Tokyo 169-8648 Japan  
 Tel : +81-3-3202-0225 Fax : +81-3-3202-5685

Representative Office DKK·TOA European Representative  
 ( Europe ) : St.Johns Innovation Centre,Cowley Rd.,  
 Cambridge CB4 0WS United Kingdom.  
 Tel : 01223-526471 Fax : 01223-709239

<http://www.toadkk.co.jp/>



Do not operate products before consulting instruction manual.

For continuous product improvement, DKK-TOA reserves the right to change specifications without notice.