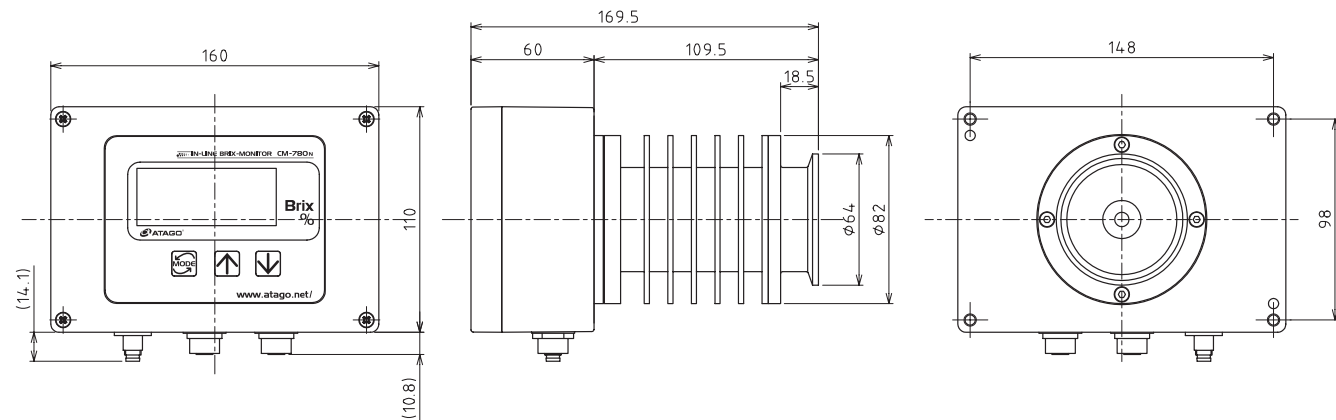


## Specifications

	CM-780N	Cat.No.3561	CM-780N-Plus	Cat.No.3562
Measurement scale	Brix (Automatic Temperature Compensation according to the sample liquid)			
Measurement range	Brix 0.0 to 78.0%, temperature 0 to 100°C			
Minimum indication	Brix 0.1%			
Measurement accuracy	Brix ±0.2%		Brix ±0.1% (0.0 to 60.0% at 5 to 60°C) Brix ±0.2% (For ranges other than above)	
Measurement temperature	5 to 100°C(Automatic Temperature Compensation)			
Ambient temperature	5 to 40°C			
Output	Recorder output : DC 4 to 20mA RS-232C output			
Materials in contact with solution	Prism : Artificial sapphire Prism stage : SUS316			
Power supply	DC24V (Power consumption 3VA)			
Accessory	Power input cable (1m)			
Maximum pressure	0.98MPa			
International Protection Class	IP64 dust-tight and splash resistant			
Dimensions & weight	16×17×11cm, 1.8kg (Main unit only)			

## Dimensions

Unit of length : mm



Weight : 1.8kg

# In-Line Brix-Monitor

## CM-780N

Cat.No.3561

## CM-780N-Plus

Cat.No.3562

In-Line model for continuously measuring concentration (Brix) of various liquid samples!

Up to  
100°C

Lightweight

Compact

Best buy



All ATAGO refractometers are designed and manufactured in Japan.

**HACCP GMP GLP** ATAGO products comply with HACCP, GMP, and GLP system standards.

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\* Specifications and appearance are subject to change without notice.

# Simple-to-Use Compact In-Line Model

IN-LINE BRIX-MONITOR  
CM-780N / CM-780N-Plus

## Features

**auto control** The recorder output (4 to 20mA) and the RS-232C output are incorporated to enable automatic control by interlinking with external equipment.

**CIP** Safe for Clean-In-Place (CIP) processes (power source must be turned off). (Up to 130°C)

**ATC** Automatic Temperature Compensation (ATC) allows the correct concentration (Brix) to be displayed and output, even if the temperature of the sample changes.

**100 °C** Automatic Temperature Compensation (ATC) range of 5 to 100°C, allowing for high temperature in-line samples to be measured accurately.

**°C** The sample temperature can be displayed by pressing key while measuring Brix (%).

**R eset** "Default" function restores factory settings.

## Applications

### Mixing, diluting and concentrating processes at food manufacturing plants

fruit juice, soft drinks, coffee, cocoa, alcoholic drinks, tomato paste, sauce, ketchup, vinegar, pickled liquid, wort, condensed milk, etc.

### Fermenting processes

soy sauce, alcohol, etc.

### Concentration shifts between different products

### Concentration of waste liquids

waste liquid of sugar, alcohol, chemical, etc.

### Concentration of impurities mixed in hydrocarbon detergents or petrochemical detergents

### Industrial fluid

cutting oil, lubricating oil, quenching oil, water-soluble detergent, starch, sodium hydroxide, alkaline solution, surfactant, amino acid, ammonia, ethanol, cesium chloride, sodium carbonate, cupric sulfate, citric acid, acetic acid, sodium glutamate, formalin, ethylene glycol, propylene glycol, coating solution, sizing agent, fire retardant, rust preventative, etc.

### Concentration control of various solutions

liquid sugar, fructose, glucose, syrup, albumen, edible oil, vegetable oil, sugarcane/sugar beet, isopropyl alcohol, dimethylformamide, polyvinyl alcohol, hydrogen peroxide, methylene chloride, coolant and brine solutions, undiluted solution of Chinese medicine, citrus oil glycerin, polymer, gelatin, protein, lotion, etc.

### CM-780N



### CM-780N-Plus



### CM-780N / CM-780N-Plus



Recorder output terminal (DC4 to 20mA)

RS-232C output terminal

Power (DC24V) input terminal

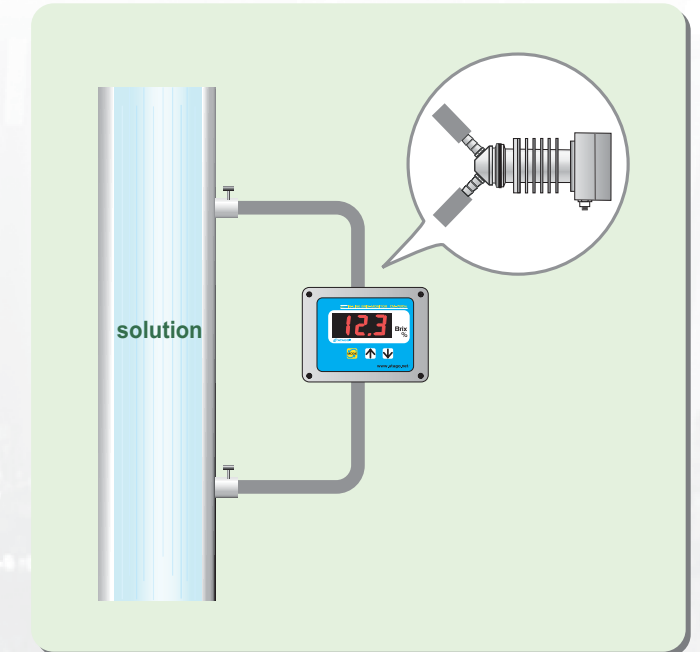
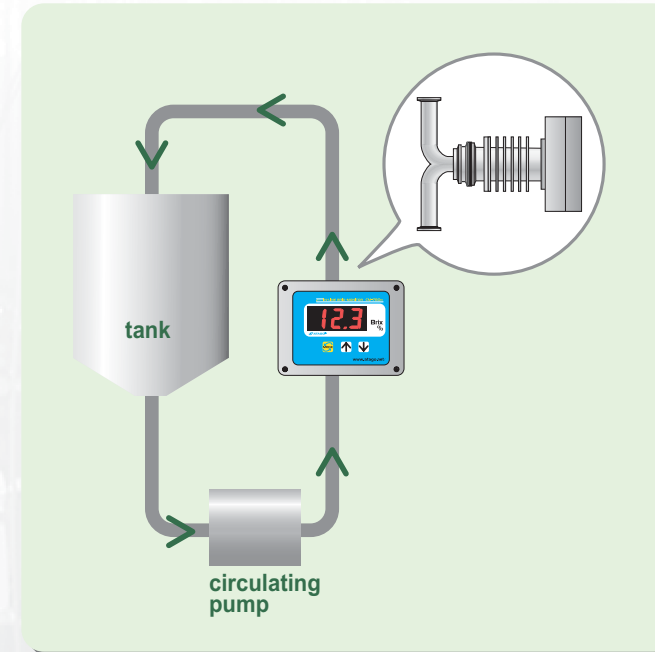
Prism

Prism stage (2S ferrule)

display section

detection section

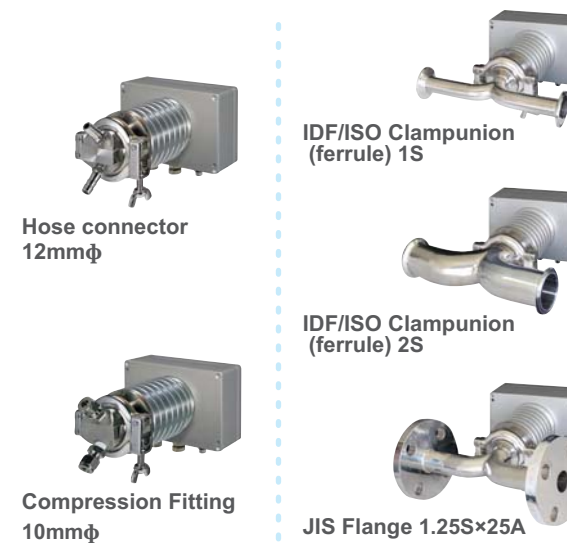
## Example for use [Optional installation accessories are recommended for optimal performance.]



Installing the CM-780N directly into main piping may result in a clogged flow. Regardless of installation method, the flow of the sample solution should be in direct contact with the prism surface.

## Options

### Sample inlet unit



Hose connector 12mmφ

IDF/ISO Clampunion (ferrule) 1S

IDF/ISO Clampunion (ferrule) 2S

Compression Fitting 10mmφ

JIS Flange 1.25S×25A

### AC adapter

The AC adapter used to convert AC100 - 240V to DC24V and to supply power to the CM-780N.



AD-32 (AC100V)  
AD-33 (AC110-120V)  
AD-34 (AC220-240V)

### Stand

Stand for mounting the CM-780N and the AC adapter.



- Sample inlet unit · outside diameter of hose connectors 12mmφ [RE-6645]
- Sample inlet unit · Double Bite Joint (DBJ) 10mmφ [RE-6651]
- Sample inlet unit · IDF/ISO Clampunion (ferrule) 1S [RE-6658]
- Sample inlet unit · IDF/ISO Clampunion (ferrule) 2S [RE-6659]
- Sample inlet unit · IDF/ISO Clampunion (ferrule) 1.5S [RE-6676]
- Sample inlet unit · JIS Flange 1.25S×25A [RE-6667]
- Sample inlet unit · JIS Flange 50A [RE-6668]

- AC adapter · AD-32 [Cat.No.3527], AD-33 [Cat.No.3528], AD-34 [Cat.No.3529]
- Recorder output cable (5m) [RE-5635]
- Recorder output cable (10m) [RE-5636]
- Recorder output cable (15m) [RE-5638]
- Recorder output cable (20m) [RE-5639]
- RS-232C cable (15m) [RE-5647]
- Stand [RE-8607]

(Stand for mounting the CM-780N and the AC adapter)