

# SUNNY-GL



Introducing from the country of high-technology.

# SUNNY-GL

Keep Quality  
Keep Security and Safety  
Keep Innovation and Improvement

## Japan Quality

Precise, convenient, and safe.

“User first” is the top priority in Japanese manufacturing.

SUNNY-GL is the dispenser with highest accuracy, quality, durability, and reliability that always provides utmost satisfaction for all.





## New Challenge Starts from SUNNY-GL

SUNNY-GL is the essential dispenser for service stations.  
Benefits to both service station owners and drivers. User-friendly and safe.  
Best partner that provides greatest fulfillment for all.

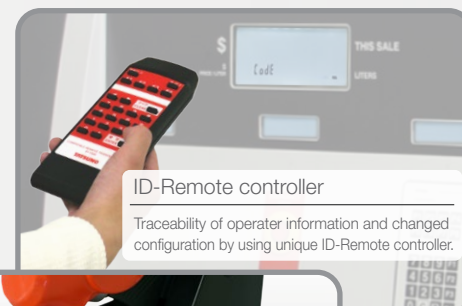
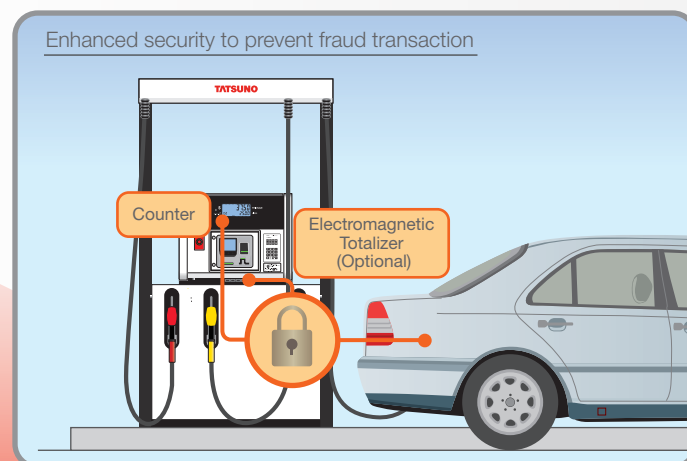
## Wide range of Product Lineup

Product lineup meets various requirements of sites and customers.  
The best model with the best function.  
Package is adjustable: wide or narrow body, suction, remote, flow rate, etc.

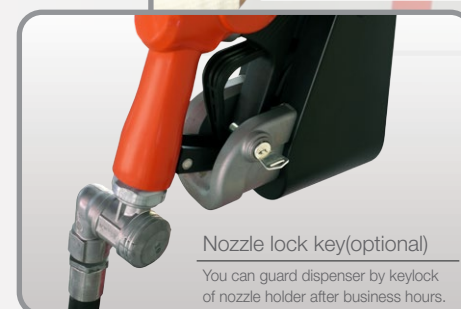


## Security Function

Prevents illegal data-changing or skimming by encryption technology for data communication between circuit boards.  
Equips with disconnection detecting function for electromagnetic totalizer.  
Protect your operation from cheatings in advance by preventive function.



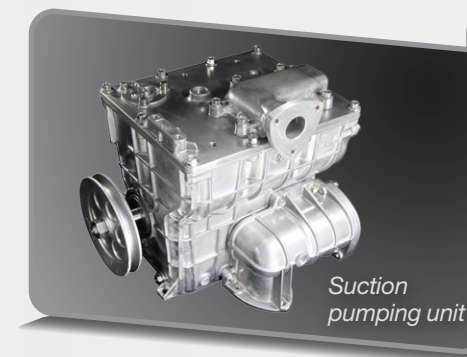
ID-Remote controller  
Traceability of operator information and changed configuration by using unique ID-Remote controller.



Nozzle lock key(optional)  
You can guard dispenser by keylock of nozzle holder after business hours.

## Components with Best Cost Performance

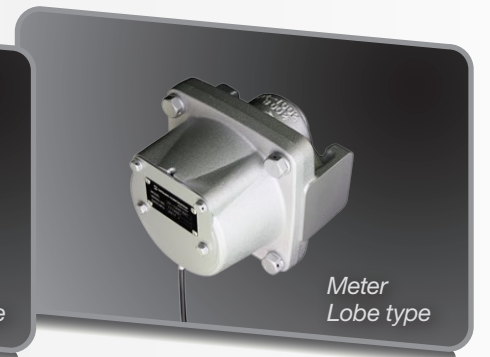
Our main components, such as pumping unit and meter, are praised for their great technology and performance with highest quality and accuracy. The structures are designed to make maintenance work more efficiently to reduce the work cost.



Suction pumping unit



Meter 4-piston type



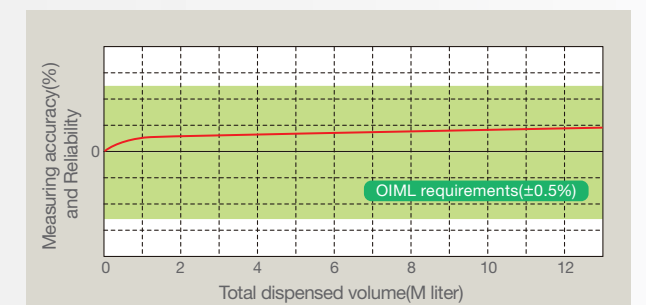
Meter Lobe type

## New Model of Die-Cast Pump

New pumping unit uses techniques based on years of experience.  
It is a suction type made from die casting. Its air separator function and flow rate supervision control function keeps instrumental error to bare minimum.

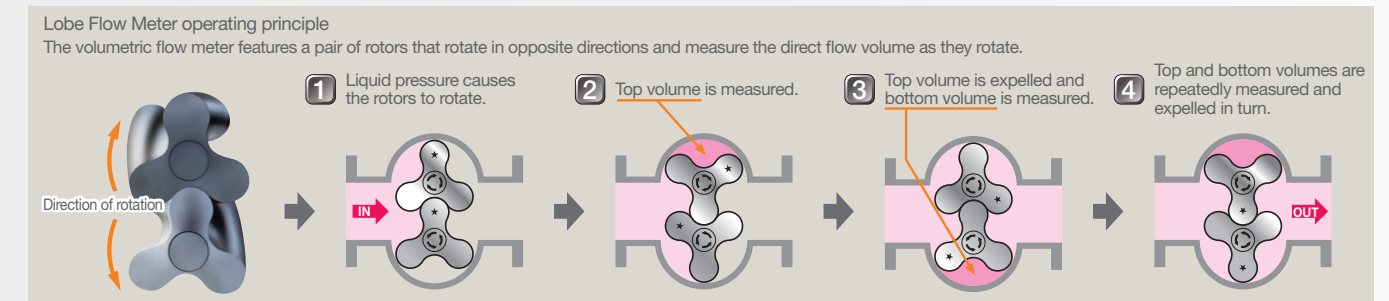
## Piston Meter

This precise and reliable meter provides safe refueling environment without deterioration in performance for a long period of time.  
New magnetic pulser with impenetrable structure improves reliability against leakage.

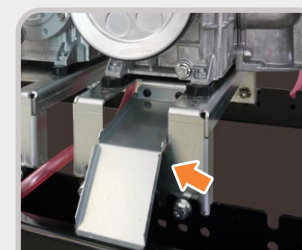


## Lobe Flow Meter

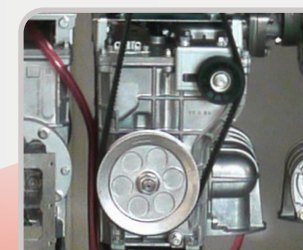
Durability greatly improved by advanced and accurate mass measurement contactless helical rotor.  
This mechanism makes the innovative design and compact body of flow meter.  
Today this flow meter is widely used as "ultimate flow meter."



## Various functions are available.



Membrane Panel  
Visualization of leakage from pumping unit



Air Detector  
Detect air and stop refueling automatically



Conductive Terminal  
Easy to check electrical conductivity



Sight Glass  
Easy to confirm the status of refueling

Extensible Counter Area

Counter Area is designed based on user's actual motion during refueling. You can upgrade functions such as OPT, printer, keypad, RFID operator authentication, etc.

Remote controller receiver

Main indicator  
(amount, volume, unit price)

Unit price indicator

Keypad

Extension space

Electromagnetic totalizer

Emergency-stop button

OPT

Its compact size fits the limited space well. Great versatility in reading various cards.

Basic configuration can be done by remote controller. Keypad is not needed, if OPT is installed.

Multifunctional LCD Counter

All necessary information are displayed on one screen. The LCD counter is bright with high visibility and is enhanced in durability (with LED backlight).

8-Digit counter can be used for any currency. (7 digits for measurement unit, 6 digit for unit price)

When not used, backlight turns off and the dispenser goes into idle state to save electric power.

Maximum 10 records of recent refueling transaction data can be indicated.

Counter can give notice of replacement timing of consumable parts.

Status icon

- ★ Dispenser status
- ⓘ Information
- ⚠ Warning
- 🔧 Maintenance call

Easy Flow Rate Control

Minor adjustment of flow rate can be done with just one button. Best flow rate can be selected for vehicles such as motorbike and truck to ensure safe and comfortable refueling.

Smooth Handling

Achieves simple and comfortable refueling. No stress. All parts of hanging hardware, including elbow, breakaway, hose, swivel and nozzle are smoothly interlocked. All actions of refueling can be done easily.



- Safety breakaway coupling prevents damage to dispenser in unpredicted situation.
- Double swivel helps to handle the hose freely.
- Nozzle holder enables easy operation of nozzle.



Reliable Nozzle and Nozzle Holder

Compact and space-saving. This contactless type nozzle holder fits the nozzle perfectly and achieves high durability. There are convenient accessories such as nozzle talker for advertisement, cover for diesel to prevent misfueling, etc.

Nozzle holder and Ultra nozzle

Contactless nozzle switch

Nozzle talker

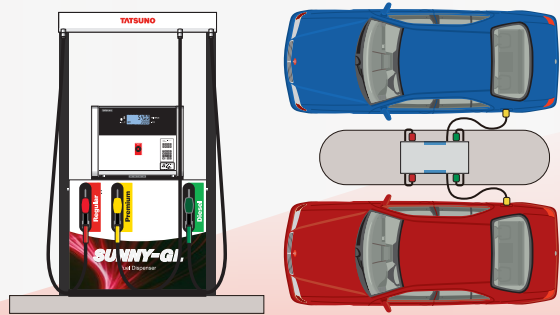
Nozzle holder cover

By using Ultra Nozzle, refueling completes in short time with small foaming. Also, auto stop function works even in 2L/min. Safe refueling is achieved.

Free Layout and Operation

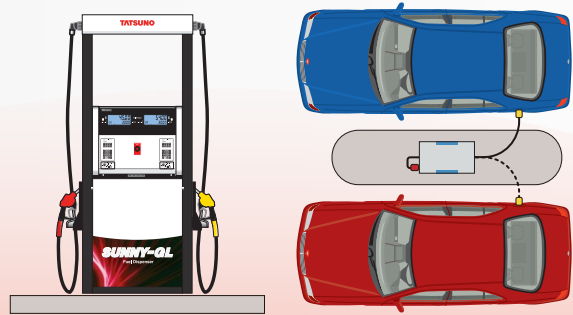
Front Nozzle Type

With a hose for same product at both sides, refueling operation can be done by lanes. The driver can choose from different products freely. Makes refueling environment open and wider.



Side Nozzle Type

With side nozzle, refueling can be done smoothly by islands. Effective operation can be managed by economical solution.





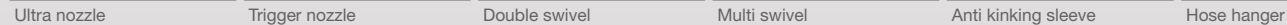
● Main feature    ▲ Optional feature    — Unavailable

1111

- Simultaneous
- Nozzle
- Meter
- Product

Pump  
Strainer  
Meter  
Nozzle  
Counter

\*1: Combination of keypad with display and unit price indicator is not available.  
\*2: For Ultra Nozzle only.









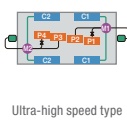
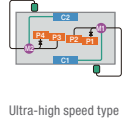
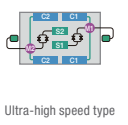
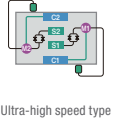
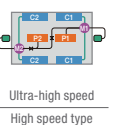
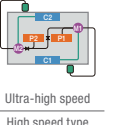
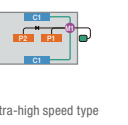
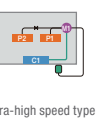


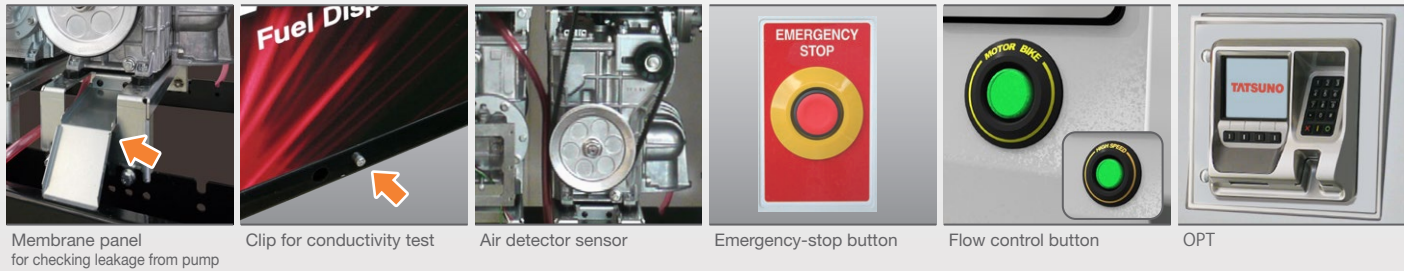
● Main feature    ▲ Optional feature    — Unavailable

Narrow Body, Side Nozzle Model					
2222		1222		1111	
WDA 2222-S	WDA 1222-S		WDA 1111-S		
WSA 2222-S	WSA 1222-S		WSA 1111-S		
▲	▲		▲		
▲	▲		▲		
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● Main feature    ▲ Optional feature    — Unavailable

## List of Functions/Models

Function		Ultra-high Speed Model							
		4222	4222	4222	4222	2222	2222	2111	2111
Appearance									
	Fueling system diagram								
Model	Suction	WDF 4222-S	WDF 4222	Remote type only	Remote type only	WDC 2222-S	WDC 2222	WDC 2111-S	WDC 2111
	Remote	WSF 4222-S	WSF 4222	WSC 4222-S	WSC 4222	WSC 2222-S	WSC 2222	WSC 2111-S	WSC 2111
POS preset		▲	▲	▲	▲	▲	▲	▲	▲
Keypad(preset) with display		▲	▲	▲	▲	▲	▲	▲	▲
Keypad(preset) without display		▲	▲	▲	▲	▲	▲	▲	▲
Interface	RS-485	▲	▲	▲	▲	▲	▲	▲	▲
	IFSF	▲	▲	▲	▲	▲	▲	▲	▲
Hose 12ft(Soft)		●	●	●	●	●	●	●	●
Hose Hanger		▲	▲	▲	▲	▲	▲	▲	▲
Nozzle	Ultra-high speed	●	●	●	●	●	●	●	●
	Auto-stop nozzle	▲	▲	▲	▲	▲	▲	▲	▲
	High speed nozzle	▲	▲	▲	▲	▲	▲	▲	▲
Swivel Single		●	●	●	●	●	●	●	●
Safety breakaway coupling	Single poppet	●	●	●	●	●	●	●	●
	Double poppet	▲	▲	▲	▲	▲	▲	▲	▲
Safety breakaway coupling cover		▲	▲	▲	▲	▲	▲	▲	▲
Electromagnetic totalizer		▲	▲	▲	▲	▲	▲	▲	▲
Alert of restoring nozzle (by key tone)		▲	▲	▲	▲	▲	▲	▲	▲
Emergency-stop button		▲	▲	▲	▲	▲	▲	▲	▲
Static electricity discharge pad		▲	▲	▲	▲	▲	▲	▲	▲
Clip for conductivity test		▲	▲	▲	▲	▲	▲	▲	▲
Earthquake sensor		▲	▲	▲	▲	▲	▲	▲	▲
Air detector sensor(for Suction model)		●	●	●	●	●	●	●	●
Membrane panel(for Suction model)		▲	▲	▲	▲	▲	▲	▲	▲
Flow control button(High-to-Standard mode)		▲	▲	▲	▲	▲	▲	▲	▲
OPT		—	▲	—	▲	—	▲	—	▲
Built-in printer		▲	▲	—	▲	—	▲	—	▲
Nozzle holder with lock		▲	▲	▲	▲	▲	▲	▲	▲
RFID		▲	▲	▲	▲	▲	▲	▲	▲



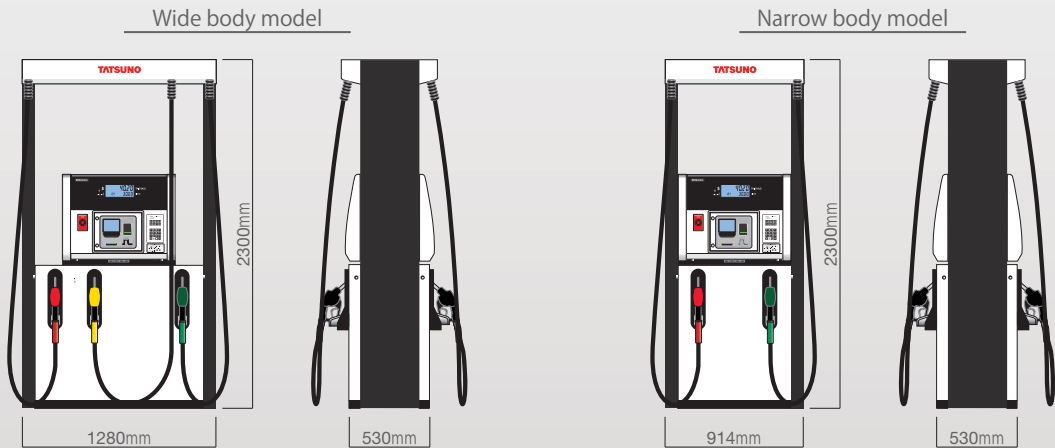
## Main Specifications

		Standard Speed ( Gasoline / Diesel )	High Speed ( Diesel )	Ultra-high Speed ( Diesel )
Delivery Speed	Suction Model	40 L/min. ( Simultaneous fuelling: 35 L/min )	70 or 80 L/min. ( Simultaneous fuelling: 40 L/min )	140 L/min. ( Simultaneous fuelling: 100 L/min )
	Remote Model	Depends on the on-site submersible pump capacity		
Measuring Accuracy		±0.25%		±0.5%
Flow Meter	Standard: 4-piston type positive displacement meter with electronic calibration system Optional: Mechanical calibration adjuster			32mm Lobe meter
Suction Pumping Unit		Internal silent gear pump with air separator, by-pass valve, suction strainer and check valve		
Suction Head (Suction Model)		4m (Gasoline Column)		
Motor (Suction Model)		Standard: 1-phase induction motor, explosion-proof, 220~240 VAC±10%, 50/60Hz 750W Optional: 3-phase induction motor, explosion-proof, 380~415 VAC±10%, 50/60Hz 750W		
Counter	Type	Micro-computer type electronic counter (LCD)		
	Character Color	Black characters on a blue field with bright LED back light		
	Display	Price: 8 digits [ 0.01 ~ 999,999.99 ] / Readout: 35.0H mm		
		Volume: 7 digits [ 0.01 ~ 99,999.99 ] / Readout: 25.4H mm		
		Unit Price: 6 digits [ 0.01 ~ 9,999.99 ] / Readout: 15.0H mm		
		※ Depending on POS registration, the display shows ' Price : 6 digits, Volume : 6 digits, Unit price : 4 digits '.		
	Electronic Totalizer	8+2 digits or 7+3 digits		
Other Functions	Self-diagnosis, Over voltage protector, Battery back-up			
keypad		Optional: Volume and amount can be preset using a 16-key-sheet + 8 programmable one-touch key buttons with click sound		
Totalizer	Totalizer	Electronic: 10 digits [ 99 999 999.99 Liters ]		
	Daily Totalizer	Electronic: 10 digits [ 99 999 999.99 Liters ]		
Electromagnetic Totalizer (Optional)		Mechanical: 7 digits [ 9 999 999 Liters ]		
Reset Device		Automatic reset in Nozzle Hanger		
Nozzle	Standard: Tatsuno nozzle with colored scarf guard / Spout size : OD 21mm or OD 25mm			OD 32mm automatic stop nozzle
	Optional: Ultra nozzle, Trigger, High speed nozzle Compatible with other manufacturers			
Swivel	Standard: Tatsuno single swivel			
	Optional: Tatsuno double swivel, Tatsuno Multi swivel(work with Ultra nozzle) or Compatible with other manufacturers			
Hose	Standard: 3/4"×12 ft, Black, Oil resistant			1 <sup>®</sup> or 1-1/4 <sup>®</sup> ×12ft, Black, Oil resistant
	Optional: Color & length by request			
Safety Breakaway Coupling		Standard: Tatsuno (Non-reusable) Optional: Compatible with other manufacturers		
Sight Glass	Optional: Tatsuno original type or Compatible with other manufacturers			Not available
Filter (Suction Model)	Optional: Paper filter			
Filter (Remote Model)	Standard: Paper filter			
	Optional: Reusable metal strainer			
Housing color	Standard: White with black base			
	Optional: Colors by request			
POS Interface	Standard: No POS interface			
	Optional: RS-485, IFSF			
Pulser	Resolution 1mL/pulse			
Initial-setting Method	ID-Remote controller			
Flow Control Valve	Proportional valve			
Connection kit for underground piping (Optional)	Suction: Flexible tube, Flange, 1-1/2" threaded			
	Remote: 1-1/2" threaded connection pipe for shear valve use			
Eathquake Sensor (Optional)	Effective against earthquakes with a seismic acceleration level of more than 100 GAL ( 5+ on the Richter Scale )			
Remote controller	Provided 1 pc per service station			

Note : The delivery speed of the pump may change due to the following conditions if it is used beyond Tatsuno's installation and operational instructions:

- 1) Size and length of hose
- 2) Size and type of nozzle/swivel
- 3) Type of oil product, suction conditions, and local piping conditions
- 4) With/without presets

Specifications are subject to change with or without prior notice.



Technology and performance that are highly acclaimed by the world.

All the main components including pumping units, meters, and nozzles are designed and developed by our own.

We offer you the reliable “Japan Quality” dispenser.



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