

Compact, high-performance measurement and control terminals

Solar Link ZERO[®]



Powerful measurements
Inverter
Up to **30** units
connected

System adaptability
More than **75**
manufacturers

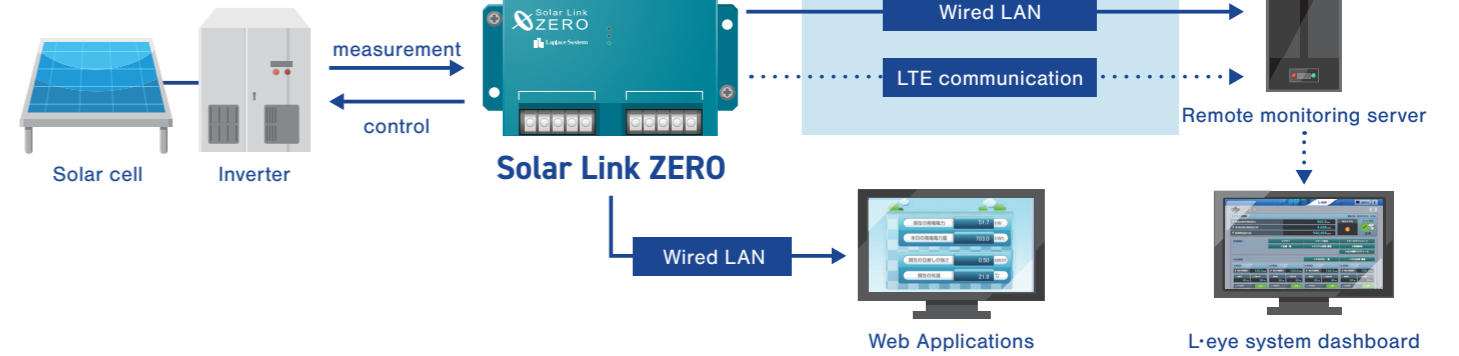
LTE Communication
No line construction required

Solar Link ZERO

Solar Link ZERO is a compact measurement and control terminal. It measures and stores the power generation status of Photovoltaic power generation in real time, and also controls inverter and equipment. Measurement and control data can be uploaded to a server via wired LAN or LTE communication for remote monitoring and PR display. It is highly scalable and can be used in a wide range of situations by combining it with various products and options.



Configuration example



Measurement Powerful measurements for a variety of needs

Equipped with 2 ports of RS-485 input/output, inverter measurement of up to 30 units* on 2 systems is possible. It also supports a wide range of smart meter, analog, contact, and pulse signal measurements. Powerful measurement that meets a variety of needs is attractive. *The measurement interval may be changed or the number of connected units may be limited depending on the inverter.

POINT Industry-leading system support

Support for systems from more than **75** companies!

The system flexibly supports many types of systems from more than 75 manufacturers.



Communication Connection methods to choose from based on location and situation

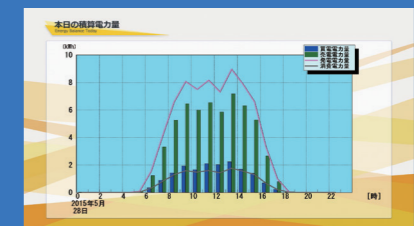
Network connectivity via wired LAN or LTE communication is available, allowing users to choose the connection method that best suits their location and situation. If LTE communication* is chosen according to the installation location, there is no need for line construction or wiring. Uploaded data can be displayed on remote monitoring screens, etc. *LTE communication is a paid option.

Control Control facilities according to purpose

Control commands for inverter output and equipment ON/OFF are given according to the purpose and scene.

Use Case 1 Optimal control of self-consumption photovoltaic power generation

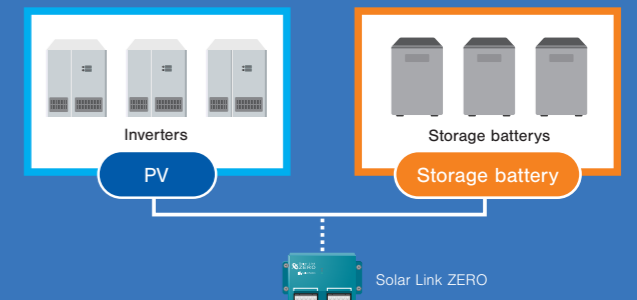
Patented control technology automatically controls power generation in accordance with power consumption. This solves problems such as reverse power flow and excessive control, and improves power generation efficiency.



On-site display screen for self-consumption

Use Case 2 Controls recharge and discharge of storage batteries

Based on the relationship between power generation and power consumption, the system commands recharge/discharge to storage batteries for optimal control to make effective use of the power generated.

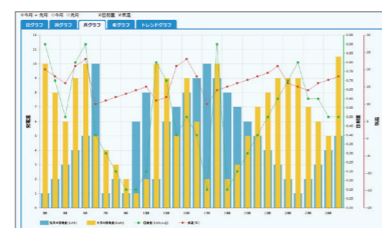


Status check via web application *Supported browsers:Google Chrome /Microsoft Edge/ Mozilla Firefox

The system is equipped with a web application function that allows users to view measurement data and configure control settings for self-consumption solar power generation via the premises network using a web browser on a Windows PC.



Power generation data screen



Graph screen

Power generation data screen

- Generated power(kw)
- Generated power amount(kwh)
- Solar radiation intensity (kw/m²)
- Temperature (°C)

Detailed data screen

- Inverter measured values
- Storage battery measured value
- Contact input signal
- Pulse input signal
- Analog input signal

*Only available for display if the above measurement is targeted.

Easy data linkage with automatic CSV data output function

Automatically outputs CSV files of measurement data to a designated destination folder in the measurement device under an internal network such as an internal LAN or VPN. This eliminates the need for manual downloading, streamlines operations, and enables data linkage with the central monitoring system.



outputtable item

- One-minute value
- Daily report
- Monthly report
- Annual report
- Fiscal year report
- Weighing value



Acquired ECHONET Lite and AIF certification for smart meters (low and high voltage)
*Japanese standard

It supports remote monitoring and output control, and in the case of self-consumption solar power generation, automatically controls the power generated in line with the power consumed. The compact housing allows space-saving installation, and measurement of analog and pulse signals, etc. is also possible.

Function

Inverter communication system

RS-485 communication is used to measure detailed data per inverter and per string.

LTE communication

Upload measurement data to a remote monitoring server using an LTE line.
*LTE communication function is a paid option.

Self-consumption control

Power generation control in accordance with power consumption to suppress reverse power flow caused by excessive power generation and maximize power generation.
*This service is for the Japanese market.

Space-saving installation

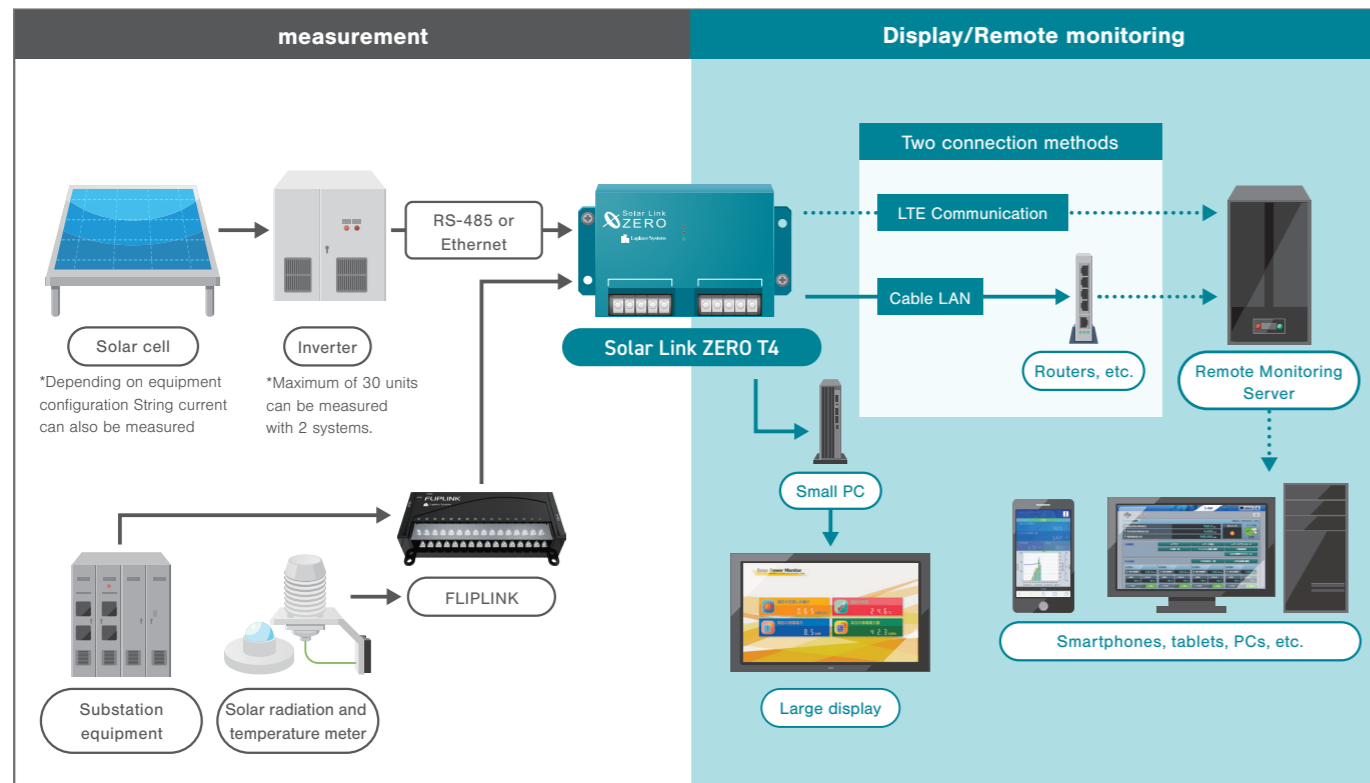
Compact housing allows space-saving installation in accordance with facilities.

Measurement with FLIPLINK

Smart terminal block Measures analog pulse signals and other signals measured by FLIPLINK.

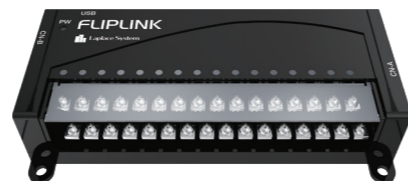
Configuration example

It can simultaneously measure the inverter, monitor the status of the substation equipment and remotely monitor the inverter.
Analogue measurement of pyranometers and thermometers via the inverter or FLIPLINK is also possible.



FLIPLINK Smart Terminal Blocks

Compact and simple terminal block-type remote I/O, based on the concept of integrating a terminal block with a measurement device. 4 models are available: solar radiation and temperature input (ST), contact and pulse input (DI), contact output (DO), and analog input (AI), which measure and output signals through communication with Solar Link ZERO.



Wide range of applications in combination with other products and options

Remote Monitoring System & Service L·eye

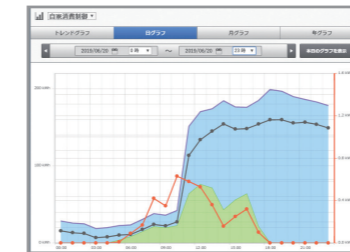
The L·eye monitoring screen displays the data measured by ZERO and sends an e-mail alert in the event of an abnormality. The “L·eye Monitoring App” for smooth remote monitoring via smartphone and the “L·eye Comprehensive monitoring” specialized for monitoring multiple power plants are also available.



Self-consumption

Graph display of purchased power, power consumption, and self-consumption control is available.

*This service is for the Japanese market.



Self-consumption control graph

Comprehensive monitoring

Specialized in the management of multiple L·eye monitoring screens and comprehensive monitoring by whole, group, or power plant.

*This service is only available in Japanese.



Comprehensive monitoring top screen

Remote control

Inverter can be remotely switched ON/OFF via the measurement device.

In addition, reservation control settings can be made by selecting the target inverter, date, and time.

*This is a paid option. *This service is for the Japanese market.



Remote control screen

Reservation setting screen

NEW Local control

Switch inverter ON/OFF directly from the web app to the measurement device.

*Must be used in conjunction with remote control.



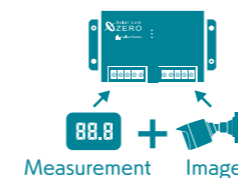
Web app local control screen

Camera image

One Solar Link ZERO unit can perform both measurement and image acquisition. Images acquired can be saved for 31 days, allowing you to check the site conditions going back in time.

*This is a paid option.

*This service is for the Japanese market.



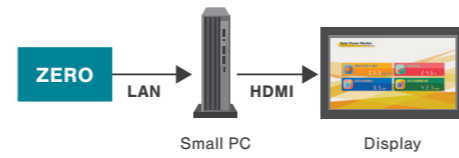
One device

A single Solar Link ZERO unit handles both measurement and communication.



Local display

Solar Link ZERO is connected to a small PC and displayed on a display via HDMI output from the PC. This can be used for on-site monitoring or as a simple PR display. Display items such as storage batteries and power purchase and sale are also supported in accordance with the system configuration.



*This is a paid option.

* 'Camera Image Option,' 'Web Camera Set,' and 'Line Share Set' cannot be used together.



Measurement screen (colorful)



Measurement screen (character)



Measurement screen (cute)



Measurement screen (diorama)



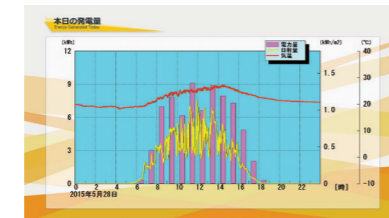
Measurement screen (photo)



Measurement screen (standard A)



Conversion screen (colorful)



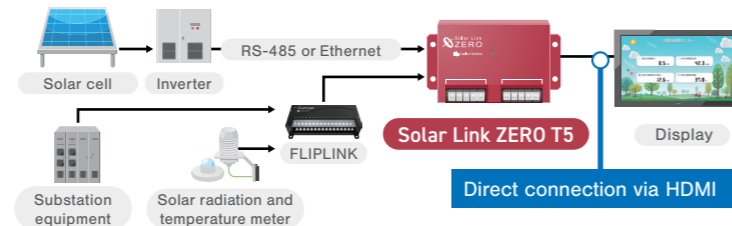
Graph screen (colorful)



Content screen (3 types)



*under development

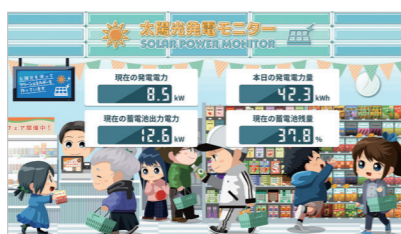


Local display from the measurement terminal is possible

Display is realized without the need for connection to a small PC, etc., enabling measurement display with less labor and cost. New screen designs and content screens are available. Displays can be tailored to system configurations such as storage batteries and trading power.



For city hall



For retailers (convenience stores)



For agriculture

*Since the product is still under development before release, there is a possibility that specification changes may occur in the future.

Specification

Specification List

*Specifications for the Japanese market.

Name	Solar Link ZERO T4	
Appearance		
Terminal	Model	Solar Link ZERO-T4
	CPU core	Quad-core Cortex-A72 (ARM v8) 64-bit
	Operating frequency	1.5 GHz
	RAM	4 Gbyte LPDDR4-3200 SDRAM
	Flash memory	32 Gbyte eMMC
	Ethernet	Wired:10BASE-T/100BASE-TX/1000BASE-T(RJ-45)
	Serial port	RS-485 input/output port (5-pin terminal block x 2) Isolation specification (withstand voltage 500V or more)
	Size	W152 x D102.4 x H46.6mm(Excluding protrusions)
	Power supply	DC5V 2A
	Power consumption	10VA(max)
	Operating temperature	-20 to 60°C (Humidity: 85%RH or less, no condensation)
	Weight	Approx. 300g
	Wireless communication	LTE wireless communication (optional)
Measurement	Number of inverter connections*	Max. 30 units
	Object of measurement	Various inverter/Variou string measurement devices/ Various storage batteries/Remote I/O *Please contact us for details
Contents	Contents	Solar Link ZERO main unit Dedicated AC adapter USB memory stick Antenna for communication Installation manual, instruction manual, etc.

*The measurement interval may be changed or the number of connected units may be limited depending on the Inverter.

Functions List

Data Management	Save in	ASP service (L-eye monitoring screen) or USB memory stick
	Data format	CSV format
Screen Related	Display screen type	Measurement screen / Conversion screen / Graph screen / Contents screen x 3 (optional)
Viewing	Via internet (For remote monitoring)	Remote Monitoring System & Service L-eye Monitoring Screen
	Via internal LAN (For local display)	<ul style="list-style-type: none"> Web application functions Data aggregation system for on site LAN *Cannot be used in combination with the remote monitoring system & service L-eye monitoring screen.