

Introduction of Power Monitoring System (for buildings)

Advantages for connecting power monitor to MONITOUCH

- It is possible to connect the power monitor to MONITOUCH without programming.
- Comm. module is not required so that it leads for the cost saving.
- It is possible to exchange the data between PLC and power monitor via MONITOUCH as a gateway.
- The measured values of the multiple power monitors (Electricity, Voltage, Current etc.) can be displayed and managed at once.
- It is possible to set and change the each value of power monitor on MONITOUCH easily.
- Visualization of the power consumption can be achieved by storing the data into CF card.

BEFORE
Connecting the power monitors to PLC

Measurement items in the building

3F Light AC

2F Light AC

1F Light AC

Power monitors PLC MONITOUCH V8 series

	Target	Item	Problem	
	Developer	Program development /modification man-hour	PLC program is required to be developed in order to connect power monitor. If the power monitor needs to be replace, it will take time to modify the system.	
	Building maintenance engineer	Operational efficiency	It is necessary to go and check all the places where these components are installed.	
	Administrator	Cost	Cost	It will cost for preparing the comm. unit of PLC and introducing the system.
		Understanding of the actual condition		It is not clear how much and where electric power is being consumed.



AFTER
Connecting the power monitors directly to MONITOUCH.

Measurement items in the building

3F Light AC

2F Light AC

1F Light AC

Save the measured data to CF card!!

Power monitors* MONITOUCH V8 series PLC

Constant /Synchronized reading

*There are three serial ports on V8 series. It is possible to connect 31 units to each port for the maximum. ("DU-10" is required when V806 is used.)

Reduction of comm. unit

No-need

[Screen Example]

<Batch Monitor>

Batch monitoring of measured value is Available!!

<Comm. Status>

Easy confirmation of comm. status!!

<Integral Power Monitor>

Easy confirmation of hourly integral power!!

Advantages of implementing MONITOUCH

Developer: Cut man-hour for program development / modification



Reduce the program development man-hour	It is only required to choose the power monitor model on the software for establishing the communication. It reduces the developing time of PLC program drastically.
Easy modification	It is only required to change the connected model on the software even when the power monitor model is changed. It will reduce the modification time of program.
Data exchange between power monitor and PLC	It is easy to exchange the data between power monitor and PLC by setting "Device Memory Map" on the software.

Building maintenance engineer: Improvement of operational efficiency by central management



Batch display of measured value	It is possible to confirm the batch data of the multiple power monitors connected to MONITOUCH.
Change the set value on MONITOUCH	It is possible to change and set the setting value on MONITOUCH without going to the place where the power monitor is installed. It saves the time and gives the improvement of operational efficiency.
Comm. Status confirmation	The restoration time of the system which is in error can be reduced because the confirmation of the device communication status on MONITOUCH is available.

Administrator : Reduce the cost of system implementation and easy confirmation of the electric consumption



Cost saving	The cost of system architecture can be drastically reduced because comm. module for power monitor is not required.
Visualization of measured value by backup	It is useful to understand and analyze the electricity consumption because the data can be stored into CF card in a csv format.

List of the connectable power monitors

The following list shows the connectable power monitor devices to V8 series as of April 2014

Model	Connection Device Selection on V-SFT V5	
Fuji Electric	PPMC (MODBUS RTU) F-MPC04P (Loader) F-MPC series/ FePSU	WE1MA (Ver.A) (MODBUS RTU) WE1MA (Ver.B) (MODBUS RTU)
OMRON	KM20	KM100
Panasonic	KW Series	

Please refer to the "V8 connection manual" for more details about the supported models.
*It can be referred from "Help" menu on V-SFT-5.

- Free upgrade of the configuration software V-SFT-5

Download of upgrade exe of the configuration software V-SFT-5 is available from our website.

* Sign up is required for downloading.

<http://www.hakko-elec.co.jp/en/download/09vsft5/index.php>

The latest version of V-SFT-5 Ver. 5.4.34.0



*Visit our website for more information