MONITOUCH

Simple & Superior & Smart

⚠ Safety Considerations

- For safe operation, read the instruction manual or user manual that comes with the product carefully or consult the distributor from which you purchased the product, before using the product.
- Products introduced in this catalog have not been designed or manufactured for such applications in a system or equipment that will affect human bodies or lives.
- Customers, who want to use the products introduced in this catalog for special systems or devices such as for atomic-energy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult the Hakko Overseas Sales Section.
- Customers are requested to prepare safety measures when they apply the products introduced in this catalog to such systems or facilities that will affect human lives or cause severe damage to property if the products become faulty.
- For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

Notes to consider before purchasing

- Appearance and specifications are subject to modification without prior notice due to technical improvements.
- Colors in the catalog may differ from the actual colors due to printing inaccuracies.
- Consult your distributor or us for further information about products in this catalog.

Environmental Compliance

RoHS Directive compliant

MONITOUCH complies with the RoHS Directive.

*For more information, please contact our sales department.

ISO 14001 certified

Hakko Electronics' Head Office and Development Center earned ISO 14001 certification in 2003.

This mark symbolizes the commitment of the Fuji Electric Group to environmental protection.

ECOLOGY Fuji Electric

Website

http://www.monitouchs8.com

Please visit us online for more detailed information about our products.

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Distributor

S8 series

Hakko Electronics Co., Ltd.

Featuring extensive functionality and high cost performance

8.4 inch **S808** CE

Setting Screen

| VGA resolution | TFT device | 256 colors | FROM 2M | SRAM 128K | Serial 2 ch | USB-B provided |

S808 model number coding

S808☐☐
- 【Power supply specifications】
  D: 24 VDC models (CE/UL/cUL compliant)
- 【Display specifications】
  C: TFT color LCD (VGA)

S806CD

| QVGA resolution | STN device | 256 colors | FROM 2M | SRAM 128K | Serial 2 ch | USB-B provided |

S806M10D/S806M20D

| QVGA resolution | STN device | MONO | FROM 2M | SRAM 128K* | Serial 2 ch | USB-B provided |

*1 S806M20D only.

5.7 inch **S806** CE

S806 model number coding

S806☐☐☐
- 【Power supply specifications】
  D: 24 VDC model (CE/UL/cUL compliant)
- 【Memory specifications】
  10: No SRAM or clock function
  20: 128 KB SRAM and clock function
- 【Display specifications】
  C: STN color LCD (QVGA)
  M: STN monochrome LCD (QVGA)

Use programmable displays to build more pleasant work environments.

Improvement (1) Smaller control panels

The ability to display a range of information on a single screen using multiple layouts lets you shrink control panels.

Improvement (2) Easier wiring

Since this approach eliminates the need for numerous switches, lamps, and other components, the amount of wiring used in the control panel can be reduced.

Improvement (3) Faster troubleshooting

Information about failures, malfunctions, and other issues can be displayed in the form of on-screen messages, speeding the troubleshooting process.

Malfunction

XX ERROR!

Product Functionality

Economical and ecological

◆ **Long life backlight** (S806 Series Only)
Adopts an environment-friendly LED backlight that does not require replacement.

◆ **Energy saving**
Attains a 40% reduction of power consumption compared with conventional products.

Conventional products	
S8 Series	40%OFF

Multi language display

The product display can be switched easily among a maximum of 16 languages, eliminating the need to create separate screens for each language.

This functionality is useful for displaying information in the local language when exporting equipment overseas or using equipment in sites with overseas workers.

【Supported fonts】Japanese, English and Western European languages, Chinese (simplified and traditional), Korean, Central European languages, Cyrillic, Greek, Turkish, and Baltic languages

Minimize screen development time

Component parts

Industry -first

"Component parts" refers to the process of grouping multiple parts together as a single function. Since the necessary functions and macros are pre-defined, you can easily create a variety of function screens simply by choosing from a list and placing as desired.

Select the desired part and place it on the screen.

That's it!

Transfer the screen program to the panel.

Enhanced USB interface functionality

◆ **Easier printer selection**
Products can be connected to PictBridge-compatible printers, eliminating the need to worry about selecting the right printer.

It's easy to print documentation such as daily and monthly reports—just connect a printer with a USB cable.

◆ **Streamlined debugging**
Use the S8's USB port to write ladder programs or monitor code execution.

USB cable
S8 series

Brand	Supported models
Mitsubishi Electric	QnH(Q) series CPU
	Q00J/00/01 CPU
	QnU series CPU
	QnH(Q) series CPU(MultiCPU)
Fuji Electric	MICREX-SX SPH/SPB CPU
Yokogawa Electric	FA-M3、FA-M3R

Simplified peripheral connectivity

By using the S8's two serial ports effectively, it is possible to connect a variety of factory automation equipment—up to two types of device at once.

PLC
RS-232C D-sub 9-pin (COM2)
S8 series
RS-422/485 D-sub 9-pin (COM1)
Temperature controllers, inverters, etc.

Up to 31 units

【Example connection with temperature controllers or inverters】

■**Memory monitoring and input**
- Monitor memories
- Configure parameters
- Monitor alarms

■**Sampling**
- Log temperature values which are continuously changing.

High-speed display of large amounts of information

The S8 supports high-speed communication at 187.5 kbps*2 with Siemens PLCs (S7-200/300 Series).

S8 series
RS-422/485 D-sub 9-pin (COM1)
187.5Kbps

Manufacturer	Supported models
Siemens	S7-200 Series (PPI connection)
	S7-300/400 Series (MPI connection)

*2 : Except S806M10D.

1
2

Accessories

Screen configuration software

V-SFT-5 (Ver. 5)

Windows 98, Me, NT Ver. 4.0, 2000, XP, XP 64 Edition, Vista 32-bit Edition, 7

Options

TC-D9 (COM1 only)

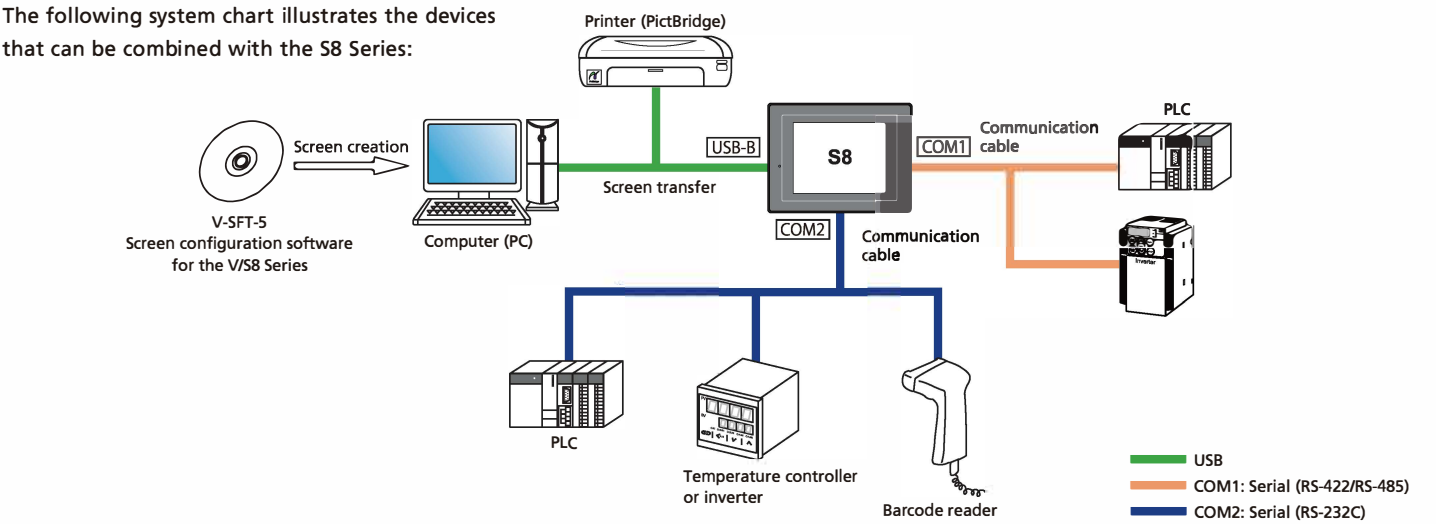Terminal block to connect an external device via RS-422/485.
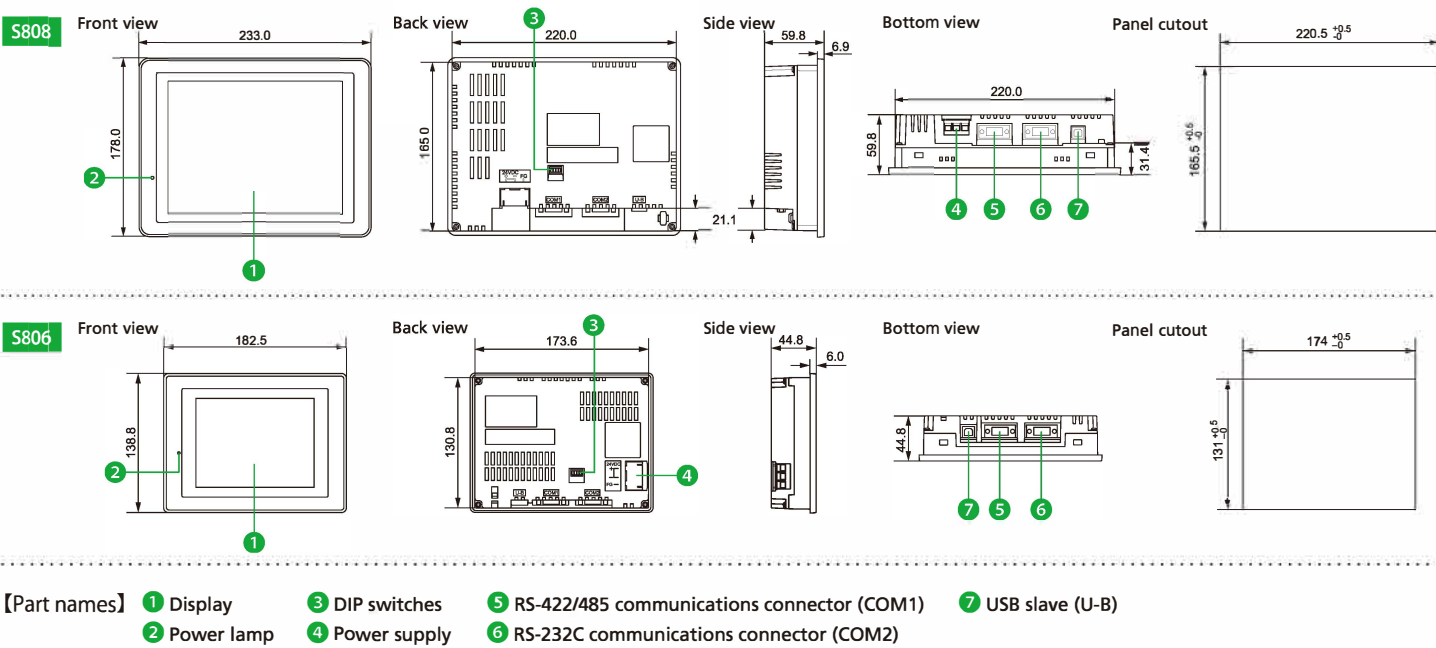
UB-FR

USB-B extension cable

V8xx-GS/V8xx-GSN10

Protective sheet for operating panels. N10: Non-glare type. (1 set of 5 sheets)

■ xx···08: For S808
　　06: For S806

System Configuration

The following system chart illustrates the devices that can be combined with the S8 Series:

Printer (PictBridge)

Screen creation

V-SFT-5
Screen configuration software for the V/S8 Series

Computer (PC)

Screen transfer

USB-B

S8

COM1   Communication cable

COM2   Communication cable

PLC

PLC

Temperature controller or inverter

Barcode reader

— USB
— COM1: Serial (RS-422/RS-485)
— COM2: Serial (RS-232C)

Dimensions and Part Names

Unit: mm

S808

Front view Back view Side view Bottom view Panel cutout

S806

Front view Back view Side view Bottom view Panel cutout

[Part names]
1. Display
2. Power lamp
3. DIP switches
4. Power supply
5. RS-422/485 communications connector (COM1)
6. RS-232C communications connector (COM2)
7. USB slave (U-B)

General specifications

Item	Model	S808	S806	
			S806C	S806M
Power supply	Rated voltage	24VDC		
	Permissible range of voltage	24VDC±10%		
	Permissible momentary power failure	Within 1ms		
	Demand(maximum rating)	9W or less	6.5W or less	4.5W or less
	Inrush current	18A, 1ms(24VDC)	10A, 1ms(24VDC)	
Insulation resistance		500VDC, 10MΩ or more		
Physical environment	Ambient temperature	0℃ to +50℃		
	Storage temperature	−10℃ to +60℃		
	Ambient humidity	85%RH or less(without dew condensation, Max. wet bulb temperature:39℃ or lower) [1]		
	Resistance to solvent	No attachment of cutting oil or organic solvent		
	Atmosphere	Not exposed to corrosive gas or conductive dust		
	Operation altitude	2,000 meters or lower		
	Contamination level	Level 2 [2]		
Mechanical operating conditions	Resistance to oscillation	Vibration frequency:10～150Hz, acceleration:9.8m/s2(1.0G)pulsating width:0.075mm, X, Y, Z:3directions 1hour each way		
	Resistance to shock	Pulse shape:half-sine, peak acceleration:147ms2(15G), X, Y, Z:3 directions, six times each way		
Electric operating conditions	Noise proof	1000Vp-p(pulse width 1μs, pulse rise time : 1ns)		
	Static discharge	Compiles with IEC61000-4-2, contact:6kV,air:8kV		
Installation conditions	Grounding	Less than 100Ω, FG/SG separated		
	Structure	Front panel : Compatible with IP65(when water-proof gasket is used.) Rear case : Compatible with IP20		
	Cooling system	Natural air cooling		
	Weight	Approx. 1.1kg	Approx. 0.6kg	
	Dimensions W×H×D(mm)	233.0×178.0×59.8	182.5×138.8×48.8	
	Panel cutout(mm)	220.5×165.5(+0.5/−0)	174.0×131.0(+0.5/−0)	
Case color		Black		
Material		PC/PS		

*1 Keep wet bulb temperature under 39℃ to avoid an accident.
*2 Contamination level is an index that shows the incidence rate of conductive substance. At Level 2, only nonconductive substance is produced, but a temporary conductive state may occur due to dew concentration.

Performance specifications

Item	Model	S808	S806	
			S806C	S806M
Display specifications	Screen memory	2.25MB		
	Display device	TFT color LCD	STN color LCD	STN monochrome LCD
	Resolution W:H(dots)	640×480	320×240	
	Display size	8.4 inches	5.7 inches	
	Colors	256 colors(without blinks)/128 colors(with blinks)		8 grayscales(with blinks)
	Backlight	Cold cathode tube	LED	
	Backlight life	Approx. 50,000 hours	Approx. 40,000 hours	Approx. 50,000 hours
	Backlight Auto OFF	Lit in normal(set by the user)		
	Power lamp	ON when the power is supplied		
	Contrast adjustment	Fixed	Adjustable(contrast adjustment screen or macro switch)	
Number of characters	1/4 size	80 columns×60 lines	40 columns×30 lines	
	1-byte	80 columns×30 lines	40 columns×15 lines	
	2-byte	40 columns×30 lines	20 columns×15 lines	
Enlargement of characters		X:1 to 8times Y:1 to 8times		
Touch switch	Switch resolution	Analog:1,024×1,024		
	Mechanical life	1 million times or more		
	Surface treatment	Hard coating, anti-glare finish 5%		
External interface	D-sub 9-pin(F) (COM1)	RS-422/485, Asynchronous type, Data length:7,8 bits, Parity:even,odd, none,Stop bit:1,2bits, Baud rate:4800, 9600, 19200, 38400, 57600, 76800, 115200 bps(187500 bps for MPI connection) [1]		
	D-sub 9-pin(M) (COM2)	RS-232C, Asynchronous type, Data length:7,8 bits, Parity:even, odd, none, Stop bit:1,2bits, Baud rate:4800, 9600, 19200, 38400, 57600, 76800, 115200 bps		
	USB(U-B)	Type B(ver1.1)		
Clock & Back up memory	Battery	Coin-type lithium primary cell		
	Back up memory(SRAM)	SRAM 128 kbytes [2]		
	Back up period	5 years from the date of manufacturing(ambient temperature 25℃)		
	Calendar accuracy	Gap±90sec. per month(ambient temperature 25℃)		

*1 Available only when connected with SIEMENS MPI, except S806M10D.
*2 Except S806M10D.

PLCs

Brand	PLCs	1 : 1	1 : n Multi-drop	n : 1 Multi-link2	n : 1 Multi-link
AB OEMax	NX7/NX Plus Series	○	○	○	○
	N7/NX Series	○	○	○	○
Allen-Bradley	PLC-5	○	○	○	○
	SLC500	○	○	○	
	MicroLogix	○		○	
	ControlLogix/CompactLogix	○		○	
Automationdirect	Direct LOGIC(K-Sequence)	○		○	
	Direct LOGIC(Modbus RTU)	○	○	○	
Baumuller	BMx-x-PLC	○		○	
DELTA	DVP Series	○	○	○	○
EATON Cutler-Hammer	ELC	○	○	○	
EMERSON PLC	EC10/EC20/EC20H	○	○	○	
FANUC	Power Mate	○		○	
FATEK AUTOMATION	FACON FB series	○	○	○	
Fuji Electric	MICREX-F series	○	○	○	○
	MICREX-F series (V4 compatible)	○	○	○	
	SPB(N-mode)&FLEX-PC series	○	○	○	
	SPB(N-mode)&FLEX-PC CPU	○		○	
	MICREX-SX SPH/SPB series	○		○	
	MICREX-SX SPH/SPB CPU	○		○	
GE Fanuc	90 series (SNP-X)	○		○	
Hitachi	HIDIC-S10/2α,S10mini	○		○	
	HIDIC-S10V	○		○	
Hitachi Industrial Equipments System	HIDIC-H	○	○	○	
	HIDIC-EHV	○	○	○	
IDEC	MICRO3	○	○	○	
	MICRO Smart	○	○	○	
	MICRO Smart pentra	○	○	○	
JTEKT	TOYOPUC	○	○	○	
KEYENCE	KV10/24 CPU	○		○	
	KV-700	○		○	
	KV-1000	○		○	
	KV-3000/5000	○		○	
KOYO ELECTRONICS	SU/SG(K-Sequence)	○	○	○	
	SU/SG(Modbus RTU)	○	○	○	
LS	MASTER-KxxxS	○		○	
	MASTER-KxxxS CNET	○	○	○	
	GLOFA CNET	○	○	○	
	GLOFA GM Serises CPU	○	○	○	○
	XGT/XGK series	○	○	○	
	XGT/XGK series CPU	○		○	
MITSUBISHI ELECTRIC	A series link	○	○	○	○
	QnA series link	○	○	○	
	QnH(Q) series link	○	○	○	
	QnH(Q) series CPU	○		○	
	Q00J/00/01 CPU	○		○	
	QnU series CPU	○		○	
	QnH(Q) series link (multi CPU)	○	○	○	
	QnH(Q) series CPU (multi CPU)	○		○	
	FX2N series CPU	○		○	
	FX1S series CPU	○		○	
	FX series link (A protocol)	○	○	○	○
	FX3U/3UC/3G series CPU	○		○	
MODICON	Modbus RTU	○	○	○	
OMRON	SYSMAC C	○	○	○	○
	SYSMAC CV	○	○	○	
	SYSMAC CS1/CJ1	○	○	○	
Panasonic Electric Works	FP series	○	○	○	○
SAIA	PCD	○	○	○	
SAMSUNG	N_plus	○	○	○	○
	SECNET	○	○	○	○
SHARP	JW series	○	○	○	○
	JW100/70H COM port	○	○	○	○
	JW20 COM port	○	○	○	○
Siemens	S7	○			
	S7-200 PPI　*187.5Kbps supported *1	○	○		
	S7-300/400MPI *187.5Kbps supported *1	○	○		
SINFONIA TECHNOLOGY (Shinko)	SELMART	○	○	○	○
TECO	TP-03 (MODBUS RTU)	○	○	○	
Telemecanique	TSX Micro	○			○
TOSHIBA	T series/V series(T compatible)	○	○	○	○
	EX series	○	○	○	
TOSHIBA MACHINE	TC200	○	○	○	
TOYO DENKI	μGPCsx series	○		○	
	μGPCsx CPU	○		○	
UNITRONICS	M90/M91/Vision Series(ASCII)	○	○	○	
Yaskawa Electric	MEMOBUS	○	○	○	
	CP9200SH/MP900	○	○	○	
	MP2000 series	○	○	○	
Yokogawa Electric	FA-M3	○	○	○	○
	FA-M3R	○	○	○	○
Others	MODBUS RTU(Free Format)	○	○	○	
	Universal Serial *2	○	○		

Temperature controllers/others

Brand	Thermo controller/Servo/Inverter
CHINO	DP1000
COPLEY	Servo
DELTA TAU DATA SYSTEMS	PMAC
Fuji Electric	PYX(MODBUS RTU)
	PXR(MODBUS RTU)
	PXG(MODBUS RTU)
	PXH(MODBUS RTU)
	F-MPC04P(Loader)
	F-MPC Series/FePSU
	FVR-E11S(MODBUS RTU)
	FVR-C11S(MODBUS RTU)
	FRENIC5000G11S/P11S(MODBUS RTU)
	FRENIC5000VG7S(MODBUS RTU)
	FRENIC-Mini(MODBUS RTU)
	FRENIC-Eco(MODBUS RTU)
	FRENIC-Multi(MODBUS RTU)
	FRENIC MEGA (MODBUS)
	HFR-C9K
	HFR-C11K
	PPMC(MODBUS RTU)
	FALDIC-α series
	PHR(MODBUS RTU)
	WA5000
	PUM(MODBUS RTU)
	ALPHA5
	APR-N series (MODBUS RTU)
	WE1MA series (MODBUS RTU)
Gammaflux	TTC2100
HITACHI	SJ300 series
	SJ700 series
IAI	X-SEL Controller
	ROBO CYLINDER(RCP2/ERC)
	ROBO CYLINDER(RCS/E-CON)
	PCON/ACON/SCON(MODBUS RTU)
MITSUBISHI ELECTRIC	FR-*500
	FR-V500
	MR-J2S-*A
	MR-J3-*A
	MR-J3-*T
	FR-E700
MOOG	J124-04x series
M-SYSTEM	R1M Series(MODBUS RTU)
OMRON	E5CK
	E5ZE
	E5ZD
	E5EK
	E5AK
	E5AN/E5EN/E5CN/E5GN
	E5ZN
	E5AR/E5ER
	V600/620
	KM20
	KM100
Others	MODBUS RTU

Brand	Thermo controller/Servo/Inverter
RKC	SR-Mini(MODBUS RTU)
	CB100/CB400/CB500/CB700/CB900(MODBUS RTU)
	SR-Mini(Standard Protocol)
	REX-F400/F700/F900(Standard Protocol)
	SRV(MODBUS RTU)
	MA900/MA901(MODBUS RTU)
	SRZ(MODBUS RTU)
SanRex	DC AUTO (HKD type)
SHARP	DS-30D
	DS-32D
SHIMADEN	SHIMADEN Standard Protocol
Shinko Technos	C Series
	FC Series
	DCL-33A
	JCx-300 Series
SUNX	LP-400
TOHO Electronics	TTM-00BT
	TTM-200(MODBUS RTU)
TOSHIBA	VF-S7
	VF-S9
	VF-S11
	VF-A7
	VF-AS1
	VF-P7
	VF-PS1
	VF-FS1
	VF-nC1
TOSHIBA MACHINE	VELCONIC series
UNIPULSE	F340A
	F371
	F800
	F720A
Yamaha	RCX142
Yamatake	SDC10
	SDC20
	SDC21
	SDC30/31
	SDC35/36
	SDC40A
	SDC40G
	DMC10
	DMC50(COM)
	AHC2001
	AHC2001+DCP31/32
	DCP31/32
YOKOGAWA M&C	UT100
	UT750
	UT550
	UT520
	UT450
	UT350
	UT320
	UT2400/2800

※1: S806M10D is not supported.
※2: For RS422/485, only the communication without flow control is supported.