

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.

Website

http://www.monitouchs8.com

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



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MONITOUCH

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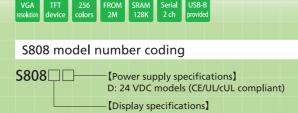
Hakko Electronics Co., Ltd.

0021NE0 1004050

Featuring extensive functionality and high cost performance







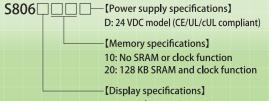
C: TFT color LCD (VGA)







S806 model number coding



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.

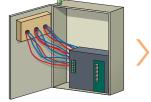




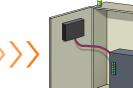


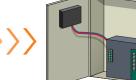
Easier wiring Improvement (2)

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.









Faster troubleshooting Improvement (3)

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







Product Functionality

Economical and ecological

Long life backlight (S806 Series Only)

Adopts an environment-friendly LED backlight that does not require

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

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.



Streamlined debugging

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

	USB cable		S8 series
Brand	Supported models		
	QnH(Q) series CPU		∖₌ ↓↓ <mark> </mark> ↑
Mitsubishi Electric	Q00J/00/01 CPU	,	
MILSUDISHI EIECLIIC	QnU series CPU		
	QnH(Q) series CPU(MultiCPU)		-
Fuji Electric	MICREX-SX SPH/SPB CPU		11
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.



■Sampling

Example connection with temperature controllers or inverters

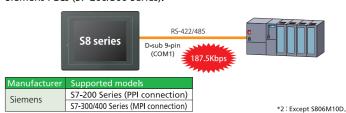
■Memory monitoring and input

Monitor memories

- Configure parameters
- · Monitor alarms
- 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).



Minimize screen development time

Component parts



"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.



Accessories

Screen configuration software

Options



V-SFT-5 (Ver. 5)

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



TC-D9 (COM1 only)

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



USB-B extension cable

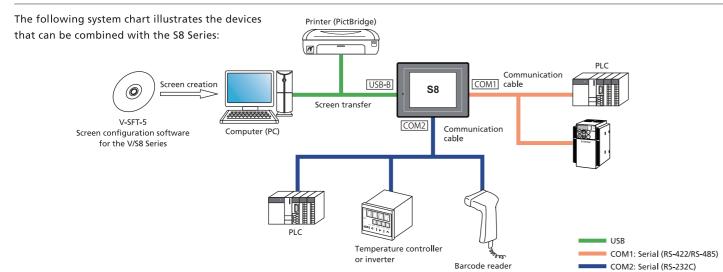


V8xx-GS/V8xx-GSN10

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

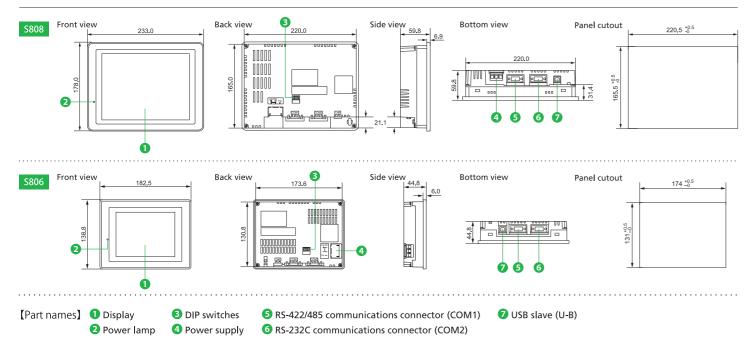
■ xx···08: For \$808 06: For \$806

System Configuration



Dimensions and Part Names





Specifications

General specifications

The same of the sa	Model	\$808	\$806		
Item Model			S806C	\$806M	
	Rated voltage	24VDC			
	Permissible range of voltage	24VDC±10%			
Power supply	Permissible momentary power failure	e Within 1 ms			
	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, $10M\Omega$ or more		
	Ambient temperature	0°C to +50°C			
	Storage temperature	-10°C to +60°C			
	Ambient humidity	85%RH or less(without dew condensation, Max. wet bulb temperature:39°C or lower) *1			
Physical environment	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	$Vibration\ frequency: 10 \sim 150 \text{Hz}, acceleration: 9.8 \text{m/s} 2 (1.0 \text{G}) pulsating\ width: 0.075 \text{mm}, X, Y, Z: 3 \text{directions}\ 1 \text{hour\ each\ way}$			
Weethanical operating conditions	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 1 μ s, pulse rise time : 1ns)			
lectric operating conditions	Static discharge	Compiles with IEC61000-4-2, contact:6kV,air:8kV			
	Grounding	Less than 100Ω, FG/SG separated			
	Structure	Front panel : Compatible with IP65(when water-proof gasket is used.) Rear case : Compatible with IP20			
Installation conditions	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)

Black

PC/PS

Performance specifications

Case color

Material

December 1981					
Item	Model		S806C	S806M	
	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		
Diaglass and affections	Colors	256 colors(without blinks	ks)/128 colors(with blinks) 8 grayscales(with b		
Display specifications	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 adjustn	nent screen or macro switch)	
	1/4 size	80 columns×60 lines	40 columns×30 lines		
Number of characters	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			
	Switch resolution	Analog:1,024×1,024			
Touch switch	Mechanical life	1 million times or more			
	Surface treatment	Hard coating, anti-glare finish 5%			
	D-sub 9-pin(F) (COM1)	RS-422/485, Asynchronous type, Data length: 7,8 bits, Parity:even, odd, none, Stop bit: 1,2 bits, Baud rate: 4800, 9600, 19200, 38400, 57600, 76800, 115200 bps (187500 bps for MPI connection) *1			
xternal interface	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)			
	Battery	Coin-type lithium primary cell			
Clock & Back up memory	Back up memory(SRAM)	SRAM 128 kbytes *2			
Clock & back up memory	Back up period	5 years from the date of manufacturing(ambient temperature 25℃)			
	Calendar accuracy	Gap±90sec. per month(ambient temperature 25°C)			

^{*1} Keep wet bulb temperature under 39°C 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

Compatible Devices

PLCs

	DI C	4 . 4		4.44 (5:15:12)	4.84 (6:1:1:1
Brand	PLCs	1:1		n : 1 Multi-link2	
AB OEMax	NX7/NX Plus Series	0	0	0	0
AD OEIVIDA	N7/NX Series	0	0	0	0
	PLC-5	0	0	0	0
	SLC500	Ö	0	0	
Allen-Bradley	MicroLogix	0		0	
	ControlLogix/CompactLogix	0		0	
Automationdirect	Direct LOGIC(K-Sequence)	0		0	
Automationalicet	Direct LOGIC(Modbus RTU)	0	0	0	
Baumuller	BMx-x-PLC	0		0	
DELTA	DVP Series	0	0	0	0
EATON Cutler-Hammer	ELC	0	0	0	
EMERSON PLC	EC10/EC20/EC20H	Ö	0	Ö	
FANUC	Power Mate	Ö		0	
			_		
FATEK AUTOMATION	FACON FB series	0	0	0	
	MICREX-F series	0	0	0	0
	MICREX-F series (V4 compatible)	0	0	0	
Fuji Electric	SPB(N-mode)&FLEX-PC series	0	0	0	
ruji Liecuic	SPB(N-mode)&FLEX-PC CPU	0		0	
	MICREX-SX SPH/SPB series	0		0	
	MICREX-SX SPH/SPB CPU	0		0	
GE Fanuc	90 series (SNP-X)	Ö		Ö	
GETATIAC	HIDIC-S10/2 α, S10mini	0		0	
Hitachi				_	
	HIDIC-S10V	0	_	0	
Hitachi Industrial Equipments System	HIDIC-H	0	0	0	
	HIDIC-EHV	0	0	0	
	MICRO3	0	0	0	
IDEC	MICRO Smart	0	0	0	
	MICRO Smart pentra	0	0	0	
JTEKT	TOYOPUC	Ö	0	0	
21 EAST	KV10/24 CPU	0			
KEYENCE	KV-700	0		0	
	KV-1000	0		0	
	KV-3000/5000	0		0	
KOYO ELECTRONICS	SU/SG(K-Sequence)	0	0	0	
KOTO ELECTRONICS	SU/SG(Modbus RTU)	0	0	0	
	MASTER-KxxxS	0		0	
	MASTER-KxxxS CNET	0	0	0	
	GLOFA CNET	0	0	0	
LS	GLOFA GM Serises CPU	0	0	0	0
					0
	XGT/XGK series	0	0	0	
	XGT/XGK series CPU	0		0	
	A series link	0	0	0	0
	QnA series link	0	0	0	
	QnH(Q) series link	0	0	0	
	QnH(Q) series CPU	0		0	
	Q00J/00/01 CPU	0		0	
	QnU series CPU	0		0	
MITSUBISHI ELECTRIC			_		
	QnH(Q) series link (multi CPU)	0	0	0	
	QnH(Q) series CPU (multi CPU)	0		0	
	FX2N series CPU	0		0	
	FX1S series CPU	0		0	
	FX series link (A protocol)	0	0	0	0
	FX3U/3UC/3G series CPU	0		0	
MODICON	Modbus RTU	0	0	0	
	SYSMAC C	0	0	0	0
OMRON	SYSMAC CV	0	0	0	Ü
OMNON	SYSMAC CV	0	0	0	
Panasonic Electric Works					
	FP series	0	0	0	0
SAIA	PCD	0	0	0	_
SAMSUNG	N_plus	0	0	0	0
2	SECNET	0	0	0	0
	JW series	0	0	0	0
SHARP	JW100/70H COM port	0	0	0	0
	JW20 COM port	0	0	0	0
	S7	0			
Siemens	S7-200 PPI *187.5Kbps supported *1	0	0		
3.5.110110	S7-300/400MPI *187.5Kbps supported *1	0	0		
SINFONIA TECHNOLOGY (Shinko)	SELMART	0	0	0	0
					0
TECO	TP-03 (MODBUS RTU)	0	0	0	
Telemencanique	TSX Micro	0	_	_	0
TOSHIBA	T series/V series(T compatible)	0	0	0	0
	EX series	0	0	0	
TOSHIBA MACHINE	TC200	0	0	0	
TOVO DENIA	μ GPCsx series	0		0	
TOYO DENKI	μGPCsx CPU	0		0	
UNITRONICS	M90/M91/Vision Series(ASCII)	Ö	0	0	
	MEMOBUS	0	0	0	
Yaskawa Electric	CP9200SH/MP900	0	0	0	
raskawa Electric	MP2000 series	0	0	0	
		0		0	0
Yokogawa Electric	FA-M3		0		
	FA-M3R	0	0	0	0
Others	MODBUS RTU(Free Format)	0	0	0	
Out Cla	Universal Serial *2	0	0		

Temperature controllers/others

Brand	Thermo controller/Servo/Inverter	
CHINO	DP1000	
COPLEY	Servo	
DELTA TAU DATA SYSTEMS	PMAC	
	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)	
Fuji Electric	FRENIC-Eco(MODBUS RTU)	
r dji Licetile	FRENIC-Multi(MODBUS RTU)	
	FRENIC MEGA (MODBUS)	
	HFR-C9K	
	HFR-C11K	
	PPMC(MODBUS RTU)	
	FALDIC- a series	
	PHR(MODBUS RTU)	
	WA5000	
	PUM(MODBUS RTU)	
	ALPHA5	
	APR-N series (MODBUS RTU)	
	WE1MA series (MODBUS RTU)	
Gammaflux	TTC2100	
LIITACUI	SJ300 series	
HITACHI	SJ700 series	
	X-SEL Controller	
IAI	ROBO CYLINDER(RCP2/ERC)	
IAI	ROBO CYLINDER(RCS/E-CON)	
	PCON/ACON/SCON(MODBUS RTU)	
	FR-*500	
	FR-V500	
MITCHDICULELECTRIC	MR-J2S-*A	
MITSUBISHI ELECTRIC	MR-J3-*A	
	MR-J3-* T	
	FR-E700	
MOOG	J124-04x series	
M-SYSTEM	R1M Series(MODBUS RTU)	
	E5CK	
	E5ZE	
	E5ZD	
	ESEK	
	E5AK	
OMRON	E5AN/E5EN/E5CN/E5GN	
	E5ZN	
	E5AR/E5ER	
	V600/620	
	KM20	
	KM100	
	- '''	

Brand	Thermo controller/Servo/Inverter
	SR-Mini(MODBUS RTU)
	CB100/CB400/CB500/CB700/CB900(MODBUS RTU)
	SR-Mini(Standard Protocol)
RKC	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
	C Series
Shinko Technos	FC Series
	DCL-33A
	JCx-300 Series
SUNX	LP-400
TOHO Electronics	TTM-00BT
	TTM-200(MODBUS RTU)
	VF-S7
	VF-S9
	VF-S11
	VF-A7
TOSHIBA	VF-AS1
	VF-P7
	VF-PS1
	VF-FS1
	VF-nC1
TOSHIBA MACHINE	VELCONIC series
	F340A
UNIPULSE	F371
	F800
Yamaha	F720A RCX142
Tallialia	SDC10
	SDC20
	SDC21
	SDC30/31
	SDC35/36
	SDC40A
Yamatake	SDC40G
	DMC10
	DMC50(COM)
	AHC2001
	AHC2001+DCP31/32
	DCP31/32
	UT100
	UT750
	UT550
	UT520
YOKOGAWA M&C	UT450
	UT350
	UT320
	UT2400/2800
	1