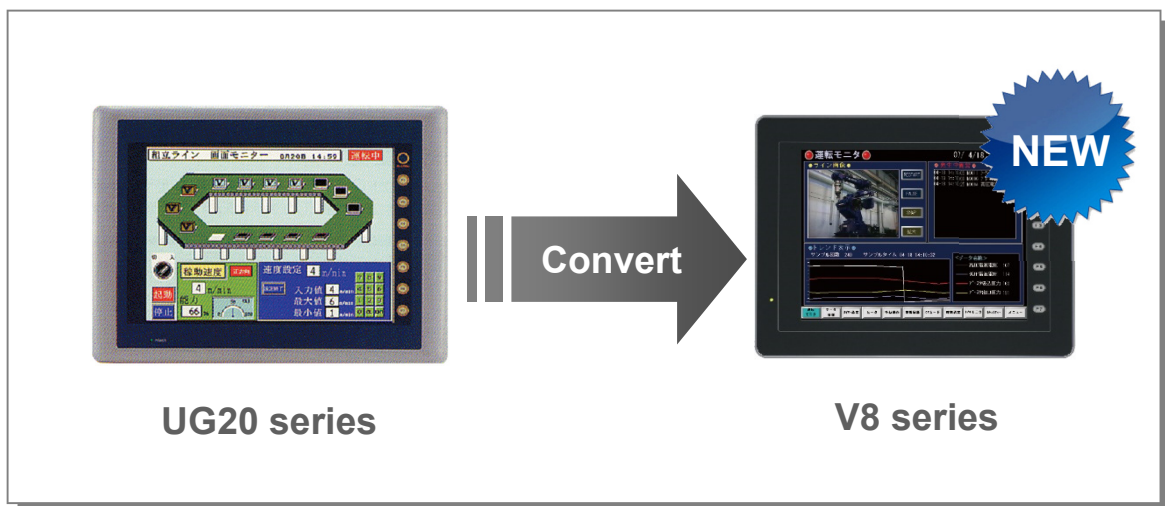


MONITOUCH

V8 Replacement Guidance [UG20 series]

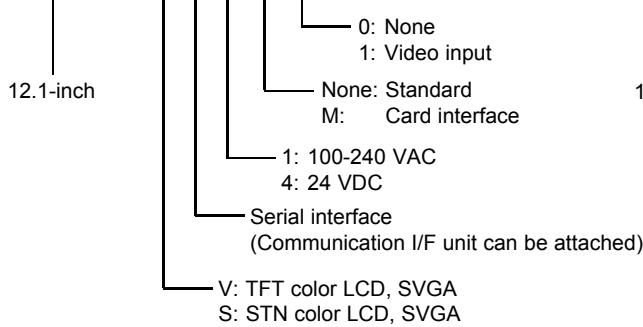


– UG20 series models

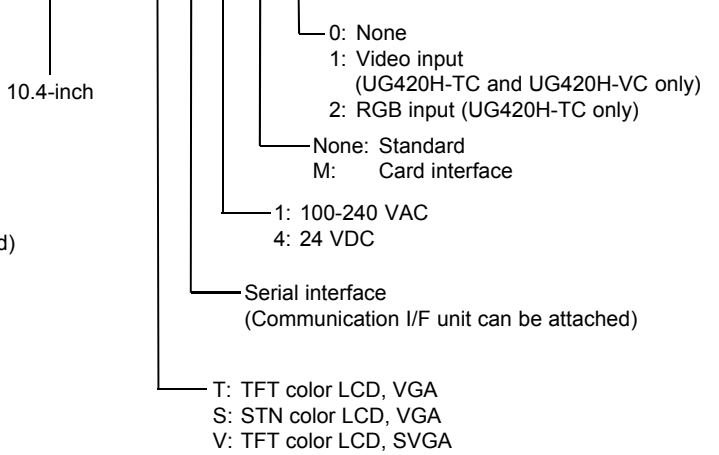
The UG20 series models are listed below.

Check the recommended models for replacement according to the UG20 series model currently in use.

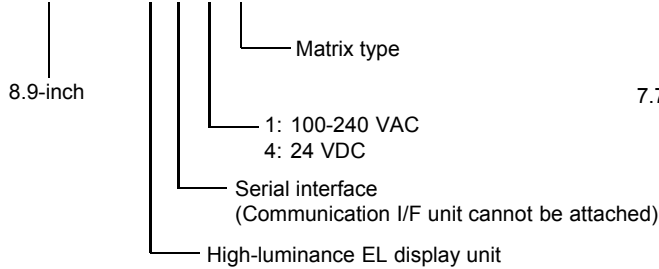
UG520H-□C□□□



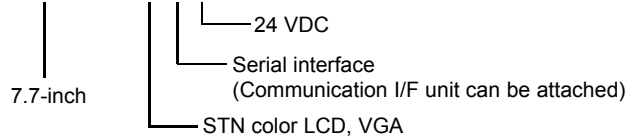
UG420H-□C□□□



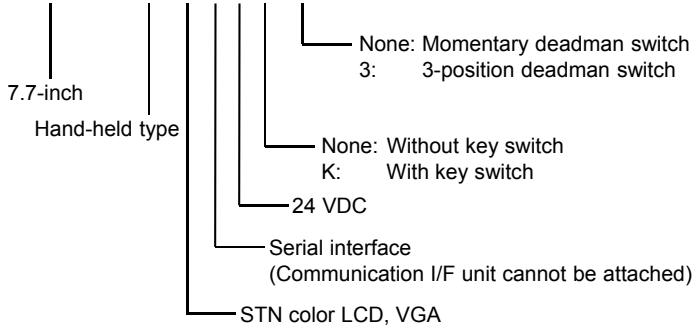
UG420H-EC□D



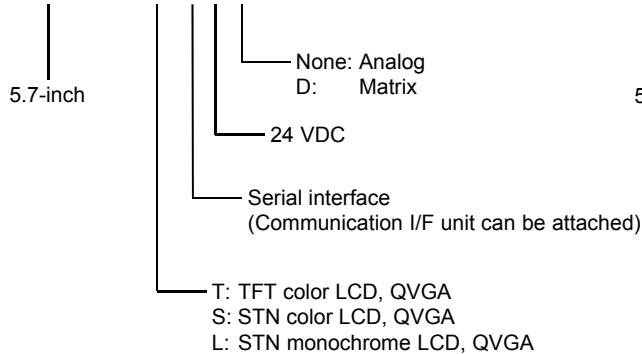
UG320H-SC4



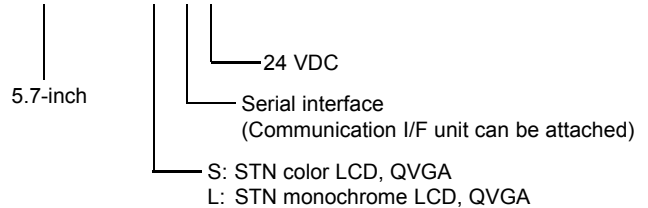
UG320HD-SC4□□




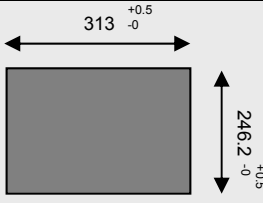
UG221H-□C4□


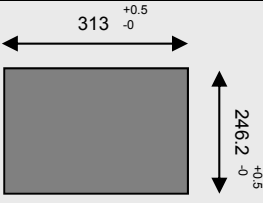


UG220H-□C4



- Recommended models for replacement of UG520 series (1)

	UG520 series			
	UG520H-VC1x	UG520H-VC1xD	UG520H-SC1x	UG520H-SC1xD
MONITOUCH				
Panel cut-out dimensions (mm)				
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	800 × 600 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	85 to 265 VAC			

Recommended models for replacement	
V812S/V812SN	V812SM/V812SMN
	
	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
100 to 240 VAC	


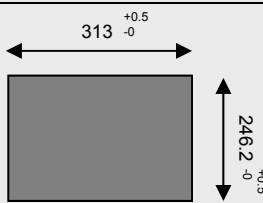
*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".


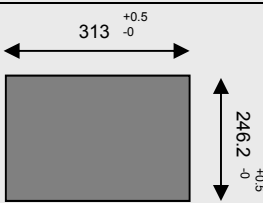
*2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".

*3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*4 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V812SN or V812SMN. Use "CUN-xx" instead.

- Recommended models for replacement of UG520 series (2)

	UG520 series			
	UG520H-VC4x	UG520H-VC4xD	UG520H-SC4x	UG520H-SC4xD
MONITOUCH				
Panel cut-out dimensions (mm)				
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	800 × 600 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	24 VDC			

Recommended models for replacement	
V812SD/V812SDN	V812SMD/V812SMDN
	
	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
24 VDC	


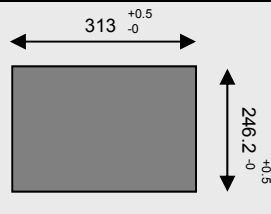
*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".


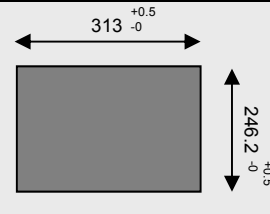
*2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".

*3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*4 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V812SDN or V812SMDN. Use "CUN-xx" instead.


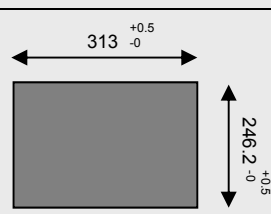
- Recommended models for replacement of UG520 series (3)

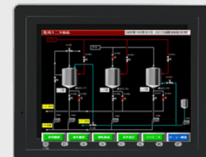
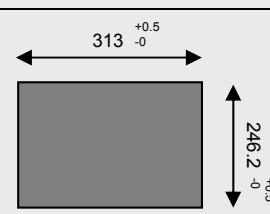
	UG520 series			
	UG520H-VC1x1	UG520H-VC1x1D	UG520H-SC1x1	UG520H-SC1x1D
MONITOUCH				
Panel cut-out dimensions (mm)				
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	800 × 600 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	85 to 265 VAC			
Video	4CH			

Recommended models for replacement	
V812iS/V812iSN	V812iSM/V812iSMN
	
	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
100 to 240 VAC	
Install an optional unit "GU-00" or "GU-10".	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *4 When Hakko Electronics' communication I/F unit "UG03I-x" is currently used, it cannot be attached to V812iSN or V812iSMN. Use "CUN-xx" instead.


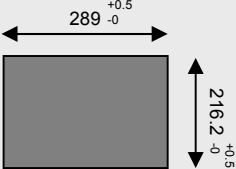
- Recommended models for replacement of UG520 series (4)


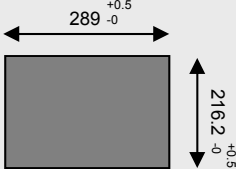
	UG520 series			
	UG520H-VC4x1	UG520H-VC4x1D	UG520H-SC4x1	UG520H-SC4x1D
MONITOUCH				
Panel cut-out dimensions (mm)				
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	800 × 600 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	24 VDC			
Video	4CH			

Recommended models for replacement	
V812iSD/V812iSDN	V812iSMD/V812iSMDN
	
	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
24 VDC	
Install an optional unit "GU-00" or "GU-10".	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *4 When Hakko Electronics' communication I/F unit "UG03I-x" is currently used, it cannot be attached to V812iSDN or V812iSMDN. Use "CUN-xx" instead.


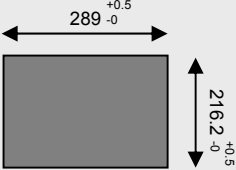
- Recommended models for replacement of UG420 series (1)


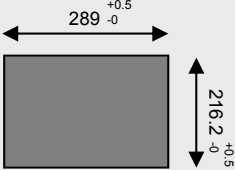
	UG420 series	
	UG420H-VC1x	UG420H-VC4x
MONITOUCH		
Panel cut-out dimensions (mm)	 Width: $289^{+0.5}_{-0}$ mm Height: $216.2^{+0.5}_{-0}$ mm	
Display device	TFT color	
Colors	128 colors	
Resolution	800 × 600 dots	
Touch switch	Analog	
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	85 to 265 VAC	24 VDC

Recommended models for replacement	
V810S/V810SN	V810SD/V810SDN
	
 Width: $289^{+0.5}_{-0}$ mm Height: $216.2^{+0.5}_{-0}$ mm	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
100 to 240 VAC	24 VDC

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V810SN or V810SDN. Use "CUN-xx" instead.


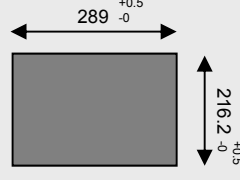
- Recommended models for replacement of UG420 series (2)


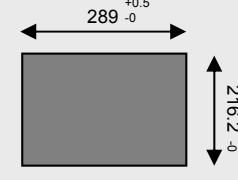
	UG420 series	
	UG420H-VC1x	UG420H-VC4x
MONITOUCH		
Panel cut-out dimensions (mm)	 Width: $289^{+0.5}_{-0}$ mm Height: $216.2^{+0.5}_{-0}$ mm	
Display device	TFT color	
Colors	128 colors	
Resolution	800 × 600 dots	
Touch switch	Analog	
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	85 to 265 VAC	24 VDC
Video	4CH	

Recommended models for replacement	
V810iS/V810iSN	V810iSD/V810iSDN
	
 Width: $289^{+0.5}_{-0}$ mm Height: $216.2^{+0.5}_{-0}$ mm	
TFT color	
65,536 colors	
800 × 600 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
100 to 240 VAC	24 VDC
Install an optional unit "GU-00" or "GU-10".	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V810iSN or V810iSDN. Use "CUN-xx" instead.


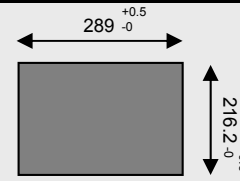
- Recommended models for replacement of UG420 series (3)


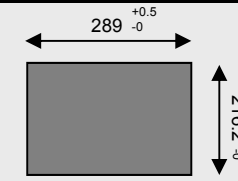
	UG420 series			
	UG420H-TC1x	UG420H-TC1xD	UG420H-SC1x	UG420H-SC1xD
MONITOUCH				
Panel cut-out dimensions (mm)	 Width: 289 ^{+0.5} / ₋₀ mm Height: 216.2 ^{+0.5} / ₋₀ mm			
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	640 × 480 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	85 to 265 VAC			

Recommended models for replacement			
V810T/V810TN	V810TM/V810TMN	V810C/V810CN ^{*4}	V810CM/V810CMN ^{*4}
			
 Width: 289 ^{+0.5} / ₋₀ mm Height: 216.2 ^{+0.5} / ₋₀ mm			
TFT color			
65,536 colors			
640 × 480 dots			
Analog	Matrix	Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
100 to 240 VAC			

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *4 When a UG20-specific optional FROM cassette "UG00P-D4" or SRAM cassette "UG00P-SR" is in use, replace with V810iC/V810iCN or V810iCM/V810iCMN.
 *5 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V810TN, V810TMN, V810(i)CN, or V810(i)CMN. Use "CUN-xx" instead.


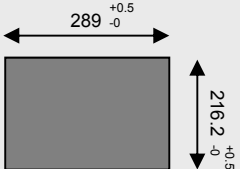
- Recommended models for replacement of UG420 series (4)


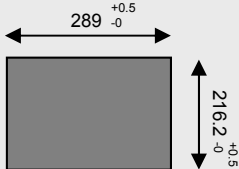
	UG420 series			
	UG420H-TC4x	UG420H-TC4xD	UG420H-SC4x	UG420H-SC4xD
MONITOUCH				
Panel cut-out dimensions (mm)	 Width: 289 ^{+0.5} / ₋₀ mm Height: 216.2 ^{+0.5} / ₋₀ mm			
Display device	TFT color		STN color	
Colors	128 colors			
Resolution	640 × 480 dots			
Touch switch	Analog	Matrix	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
Power supply	24 VDC			

Recommended models for replacement			
V810TD/V810TDN	V810TMD/V810TMDN	V810CD/V810CDN ^{*4}	V810CMD/V810CMDN ^{*4}
			
 Width: 289 ^{+0.5} / ₋₀ mm Height: 216.2 ^{+0.5} / ₋₀ mm			
TFT color			
65,536 colors			
640 × 480 dots			
Analog	Matrix	Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485			
24 VDC			

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *4 When a UG20-specific optional FROM cassette "UG00P-D4" or SRAM cassette "UG00P-SR" is in use, replace with V810iCD/V810iCDN or V810iCMD/V810iCMDN.
 *5 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V810TDN, V810TMDN, V810(i)CDN, or V810(i)CMDN. Use "CUN-xx" instead.

- Recommended models for replacement of UG420 series (5)

	UG420 series		
	UG420H-TC1x1	UG420H-TC1x1D	UG420H-TC1x2
MONITOUCH			
Panel cut-out dimensions (mm)			
Display device	TFT color		
Colors	128 colors		
Resolution	640 × 480 dots		
Touch switch	Analog	Matrix	Analog
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485		
Power supply	85 to 265 VAC		
Video	4CH	None	
RGB input	None	1CH	

Recommended models for replacement	
V810iT/V810iTN	V810iTM/V810iTMN
	
	
TFT color	
65,536 colors	
640 × 480 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
100 to 240 VAC	
Install an optional unit "GU-00" or "GU-10".	
Install an optional unit "GU-01" or "GU-11".	


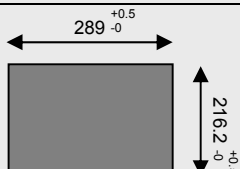
*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".


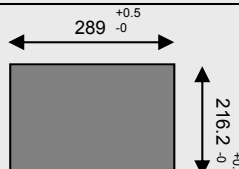
*2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".

*3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*4 When Hakko Electronics' communication I/F unit "UG03I-x" is currently used, it cannot be attached to V810iTN or V810iTMN. Use "CUN-xx" instead.

- Recommended models for replacement of UG420 series (6)

	UG420 series		
	UG420H-TC4x1	UG420H-TC4x1D	UG420H-C4x2
MONITOUCH			
Panel cut-out dimensions (mm)			
Display device	TFT color		
Colors	128 colors		
Resolution	640 × 480 dots		
Touch switch	Analog	Matrix	Analog
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485		
Power supply	24 VDC		
Video	4CH	None	
RGB input	None	1CH	

Recommended models for replacement	
V810iTD/V810iTDN	V810iTMD/V810iTMDN
	
	
TFT color	
65,536 colors	
640 × 480 dots	
Analog	Matrix
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
24 VDC	
Install an optional unit "GU-00" or "GU-10".	
Install an optional unit "GU-01" or "GU-11".	


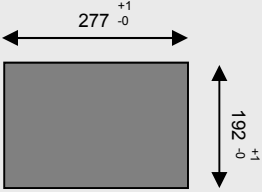
*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".


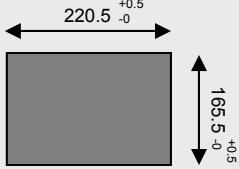
*2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".

*3 When replaced with an analog switch model, two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*4 When Hakko Electronics' communication I/F unit "UG03I-x" is currently used, it cannot be attached to V810iTDN or V810iTMDN. Use "CUN-xx" instead.


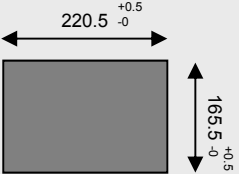
- Recommended models for replacement of UG420H-EC1D series


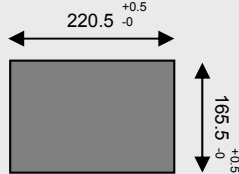
	UG420H-EC1D series	
	UG420H-EC1D	UG420H-EC4D
MONITOUCH		
Panel cut-out dimensions (mm)	 Width: 277^{+1}_{-0} mm Height: 192^{+1}_{-0} mm	
Display device	EL / high-luminance EL	
Colors	2 colors	
Resolution	640 × 400 dots	
Touch switch	Matrix	
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply *4	100 to 240 VAC	24 VDC

Recommended models for replacement	
V808CD/V808CDN	
	
 Width: $220.5^{+0.5}_{-0}$ mm Height: $165.5^{+0.5}_{-0}$ mm	
Use Hakko Electronics' mounting panel adaptor "PAD-V608-01".	
TFT color	
65,536 colors	By setting the display color to 128 colors, settings compatible with GD-80 are available.
640 × 480 dots	The resolution of 640 × 400 is also available.
Analog	
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 To use a terminal block for connection, use Hakko Electronics' optional terminal converter "TC-D9".
 *3 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *4 When there is no DC power supply available in the existing system, use Hakko Electronics' optional unit "V808C-PW".



- Recommended models for replacement of UG320H series

	UG320H series	
	UG320H-SC4	
MONITOUCH		
Panel cut-out dimensions (mm)	 Width: $220.5^{+0.5}_{-0}$ mm Height: $165.5^{+0.5}_{-0}$ mm	
Display device	STN color	
Colors	128 colors	
Resolution	640 × 480 dots	
Touch switch	Analog	
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	24 VDC	

Recommended models for replacement	
V808CD/V808CDN *3	
	
 Width: $220.5^{+0.5}_{-0}$ mm Height: $165.5^{+0.5}_{-0}$ mm	
TFT color	
65,536 colors	
640 × 480 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
24 VDC	



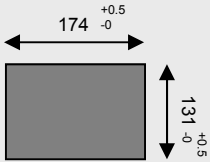
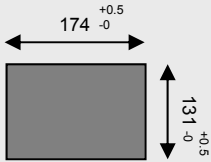
*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".
 *2 When Hakko Electronics' optional unit "UG00P-TC" is currently used, use an optional terminal converter "TC-D9".
 *3 When a UG20-specific optional FROM cassette "UG00P-D4" or SRAM cassette "UG00P-SR" is in use, replace with V808iCD or V808iCDN.
 *4 When Hakko Electronics' communication I/F unit "UG03i-x" is currently used, it cannot be attached to V808(i)CDN. Use "CUN-xx" instead.

- Recommended models for replacement of UG320HD series

	UG320HD series				Recommended models for replacement			
	UG320HD-SC4	UG320HD-SC4K	UG320HD-SC43	UG320HD-SC4K3	V808CH0	V808CH1	V808CH2	V808CH3
MONITOUCH								
Display device	STN color				TFT color			
Colors	128 colors				65,536 colors			
Resolution	640 × 480 dots				640 × 480 dots			
Touch switch	Analog				Analog			
Communication I/F	Terminal block (TB1)				Terminal block: RS-232C (TB2) / RS-422/485 (TB3)			
Power supply	24 VDC (TB1)				24 VDC (TB1)			


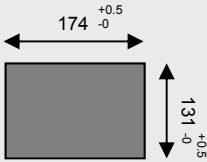
*1 Use the V808CH-specific cable "V8H-C" as a PLC connection cable.


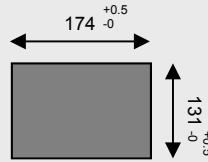
- Recommended models for replacement of UG221H series (1)

	UG221H series		Recommended models for replacement	
	UG221H-TC4	UG221H-TC4D	V806TD/V806TDN ^{*4}	
MONITOUCH				
Panel cut-out dimensions (mm)	 174 ^{+0.5} ₋₀ mm width, 131 ^{+0.5} ₋₀ mm height		 174 ^{+0.5} ₋₀ mm width, 131 ^{+0.5} ₋₀ mm height	
Display device	TFT color		TFT color	
Colors	16 colors		65,536 colors	
Resolution	320 × 240 dots		320 × 240 dots	
Touch switch	Analog	Matrix	Analog	
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485		D-sub 9-pin: RS-232C/422/485 (with "DU-10" or "DUN-10" attached) Modular jack 8-pin (2 ports): RS-232C/422/485 ^{*3}	
Power supply	24 VDC		24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable and attaching "DU-10" or "DUN-10", use Hakko Electronics' conversion cable "D9-D25". When not attaching "DU-10" nor "DUN-10" (except for connection with a Mitsubishi A series CPU), use Hakko Electronics' conversion cable "MJ2-PLC". For connection with a Mitsubishi A series CPU, use "V706-ACPU".
 *2 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *3 The MJ2 port can be used for connection via RS-422 (4-wire connection).
 *4 When a UG20-specific optional SRAM cassette "UG00P-SR" is in use, replace with V806iTD or V806iTDN.
 *5 When Hakko Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V806(i)TDN. Use "CUN-xx" instead.
 *6 When using the D-sub 9-pin connector on the V806, use "DU-10" for V806(i)TD and "DUN-10" for V806(i)TDN.


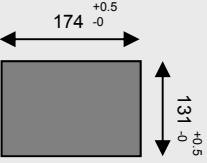
- Recommended models for replacement of UG221H series (2)

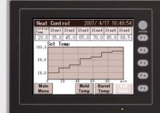
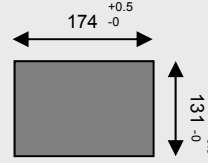
	UG221H series	
	UG221H-SC4	UG221H-SC4D
MONITOUCH		
Panel cut-out dimensions (mm)		
Display device	STN color	
Colors	16 colors	
Resolution	320 × 240 dots	
Touch switch	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	24 VDC	

Recommended models for replacement	
V806CD/V806CDN *4	
	
	
STN color	
65,536 colors	
320 × 240 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 (with "DU-10" or "DUN-10" attached) Modular jack 8-pin (2 ports): RS-232C/422/485 *3	
24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable and attaching "DU-10" or "DUN-10", use Hakkō Electronics' conversion cable "D9-D25". When not attaching "DU-10" nor "DUN-10" (except for connection with a Mitsubishi A series CPU), use Hakkō Electronics' conversion cable "MJ2-PLC". For connection with a Mitsubishi A series CPU, use "V706-ACPU".
 *2 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *3 The MJ2 port can be used for connection via RS-422 (4-wire connection).
 *4 When a UG20-specific optional SRAM cassette "UG00P-SR" is in use, replace with V806iCD or V806iCDN.
 *5 When Hakkō Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V806(i)CDN. Use "CUN-xx" instead.
 *6 When using the D-sub 9-pin connector on the V806, use "DU-10" for V806(i)CD and "DUN-10" for V806(i)CDN.


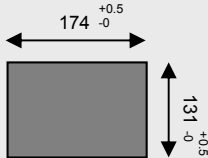
- Recommended models for replacement of UG221H series (3)


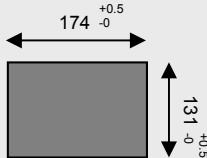
	UG221H series	
	UG221H-LC4	UG221H-LC4D
MONITOUCH		
Panel cut-out dimensions (mm)		
Display device	STN monochrome	
Colors	8-level grayscale	
Resolution	320 × 240 dots	
Touch switch	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	24 VDC	

Recommended models for replacement	
V806MD/V806MDN *4	
	
	
STN monochrome	
16-level grayscale	
320 × 240 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 (with "DU-10" or "DUN-10" attached) Modular jack 8-pin (2 ports): RS-232C/422/485 *3	
24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable and attaching "DU-10" or "DUN-10", use Hakkō Electronics' conversion cable "D9-D25". When not attaching "DU-10" nor "DUN-10" (except for connection with a Mitsubishi A series CPU), use Hakkō Electronics' conversion cable "MJ2-PLC". For connection with a Mitsubishi A series CPU, use "V706-ACPU".
 *2 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *3 The MJ2 port can be used for connection via RS-422 (4-wire connection).
 *4 When a UG20-specific optional SRAM cassette "UG00P-SR" is in use, replace with V806iMD or V806iMDN.
 *5 When Hakkō Electronics' communication I/F unit "UG031-x" is currently used, it cannot be attached to V806(i)MDN. Use "CUN-xx" instead.
 *6 When using the D-sub 9-pin connector on the V806, use "DU-10" for V806(i)MD and "DUN-10" for V806(i)MDN.


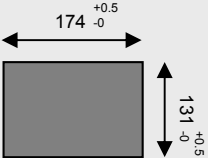
- Recommended models for replacement of UG220H series (1)

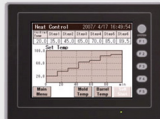
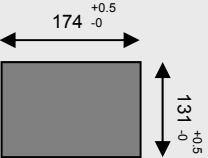
	UG220H series	
	UG220H-SC4	UG220H-SC4D
MONITOUCH		
Panel cut-out dimensions (mm)		
Display device	STN color	
Colors	16 colors	
Resolution	320 × 240 dots	
Touch switch	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	24 VDC	

Recommended models for replacement	
V806CD/V806CDN	
	
	
STN color	
65,536 colors	
320 × 240 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 (with "DU-10" or "DUN-10" attached) Modular jack 8-pin (2 ports): RS-232C/422/485 ^{*3}	
24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable and attaching "DU-10" or "DUN-10", use Hako Electronics' conversion cable "D9-D25". When not attaching "DU-10" nor "DUN-10" (except for connection with a Mitsubishi A series CPU), use Hako Electronics' conversion cable "MJ2-PLC". For connection with a Mitsubishi A series CPU, use "V706-ACPU".
 *2 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *3 The MJ2 port can be used for connection via RS-422 (4-wire connection).
 *4 When Hako Electronics' communication I/F unit "UG02I-x" is currently used, use "CU-xx" for V806CD and use "CUN-xx" for V806CDN.
 *5 When using the D-sub 9-pin connector on the V806, use "DU-10" for V806CD and "DUN-10" for V806CDN.

- Recommended models for replacement of UG220H series (2)

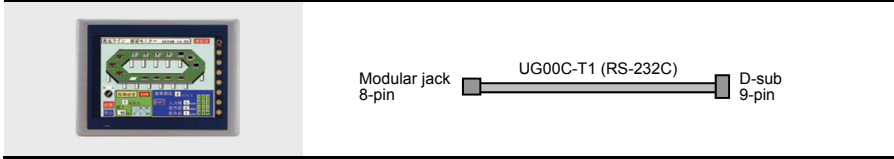
	UG220H series	
	UG220H-LC4	UG220H-LC4D
MONITOUCH		
Panel cut-out dimensions (mm)		
Display device	STN monochrome	
Colors	8-level grayscale	
Resolution	320 × 240 dots	
Touch switch	Analog	Matrix
Communication I/F	D-sub 25-pin: RS-232C/422/485 Modular jack 8-pin (2 ports): RS-232C/485	
Power supply	24 VDC	

Recommended models for replacement	
V806MD/V806MDN	
	
	
STN monochrome	
16-level grayscale	
320 × 240 dots	
Analog	
D-sub 9-pin: RS-232C/422/485 (with "DU-10" or "DUN-10" attached) Modular jack 8-pin (2 ports): RS-232C/422/485 ^{*3}	
24 VDC	

*1 Use a V8-specific cable as a PLC connection cable. When using the existing cable and attaching "DU-10" or "DUN-10", use Hako Electronics' conversion cable "D9-D25". When not attaching "DU-10" nor "DUN-10" (except for connection with a Mitsubishi A series CPU), use Hako Electronics' conversion cable "MJ2-PLC". For connection with a Mitsubishi A series CPU, use "V706-ACPU".
 *2 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.
 *3 The MJ2 port can be used for connection via RS-422 (4-wire connection).
 *4 When Hako Electronics' communication I/F unit "UG02I-x" is currently used, use "CU-xx" for V806MD and use "CUN-xx" for V806MDN.
 *5 When using the D-sub 9-pin connector on the V806, use "DU-10" for V806MD and "DUN-10" for V806MDN.

- Screen program transfer

- UG20 series



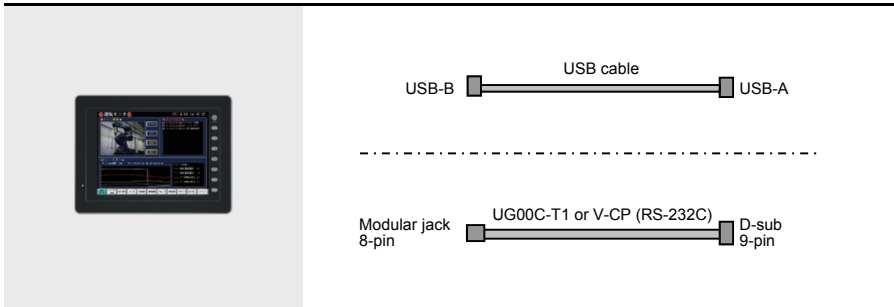
[Screen configuration software]

V-SFT-5 (Ver. 5)

Windows 98SE / NT4.0 / Me / 2000 / XP / XP 64 Edition / Vista (32bit, 64bit) / 7 (32bit, 64bit) / 8 (32bit, 64bit) / 8.1 (32bit, 64bit) / 10 (32bit, 64bit)



- V8 series



[Screen configuration software]

V-SFT-5 (Ver. 5)

Windows 98SE / NT4.0 / Me / 2000 / XP / XP 64 Edition / Vista (32bit, 64bit) / 7 (32bit, 64bit) / 8 (32bit, 64bit) / 8.1 (32bit, 64bit) / 10 (32bit, 64bit)

V-SFT-6 (Ver. 6)

Windows XP / XP 64 Edition / Vista (32bit, 64bit) / 7 (32bit, 64bit) / 8 (32bit, 64bit) / 8.1 (32bit, 64bit) / 10 (32bit, 64bit)

* Screen programs can also be transferred via Ethernet.

- Screen program conversion

The UG20 series can be replaced with the V8 series by converting the UG20 series screen program using V-SFT-5 or V-SFT-6 (V series screen configuration software).

However, note that 100% compatibility is not ensured and some functions may be limited or may not be available after replacement.

* The indicated recommended model for replacement can be used with minimal restrictions. Please note that other models not described here can also be used; make a selection according to your system requirements.

Hakko Electronics Co., Ltd.

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<https://monitouch.fujielectric.com/>