

H-SERIES - THE RATIONAL CHOICE



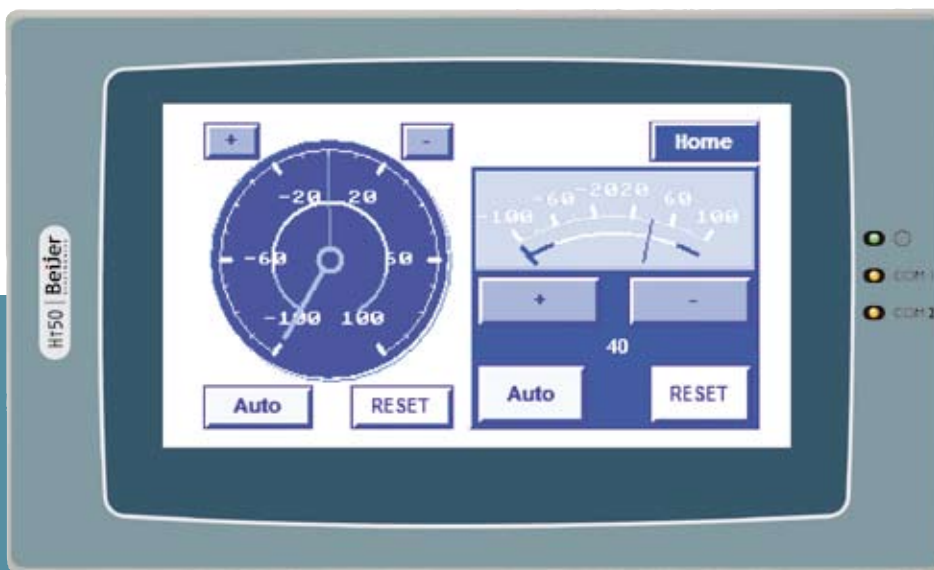
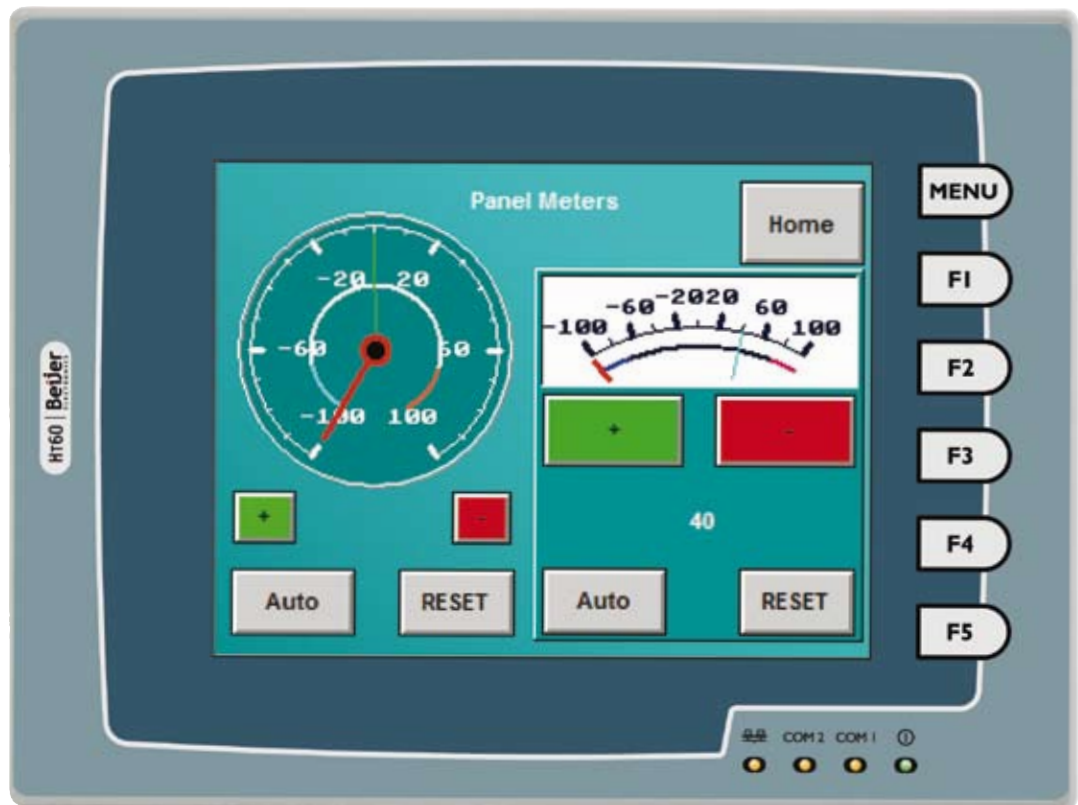
FROM PERSON TO PROCESS.

Beijer
ELECTRONICS

The rational choice

Operator terminals matching your specific needs

The H-series offers valuable HMI functionality at an affordable level. The series include keypad and touch screen interfaces and is available in five different sizes from 3 to 10.4 inches. Offering three levels of functionality - Standard, Plus and Network - the H-series enables you to select and pay for what level of HMI technology you need.

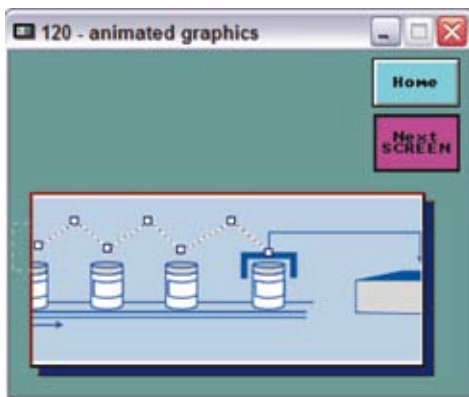


Off-line and on-line simulation

In order to save valuable time and money at on-site commissioning, H-Designer provides powerful "Off-line and On-line Simulation". This allows for the HMI project to be thoroughly tested either just on a PC, or by combining the HMI with a PC to comprehensively test HMI and controller reactions, communications etc.

- Off-line simulation allows the developer to quickly test the entire project and verify the overall functionality of screens and alarms
- On-line simulation proves the communication and the functionality of the host controller, such as a PLC or inverter

Animated graphics



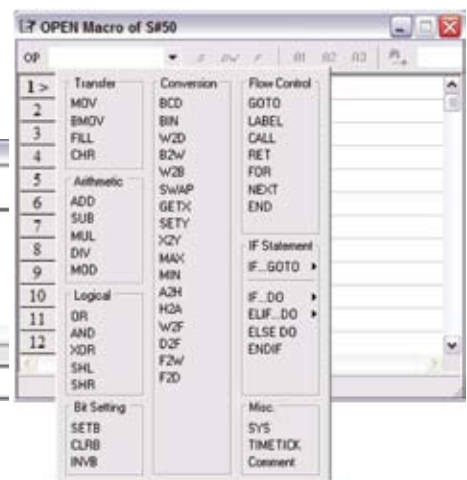
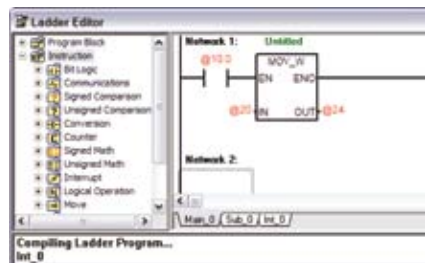
The graphic handling in the H-series is developed with both the configurator and the user in mind. The animated graphics allow a variety of graphic possibilities with only the configurator's imagination being the limit.

- Import graphic formats such as Bitmaps, JPEG, GIF and AutoCAD™ files (*.bmp, *.jpg, *.gif, *.dwg, *.dxf)
- Supports animated gif images for complex and flexible screen creations
- Graphics can be moved in predefined paths or freely controlled by the host controller to maximize screen space
- Scrolling text can be used allowing long text strings to be displayed

Ladder or macro functionality

H-Designer saves valuable time by providing ready-made modules for e.g. arithmetic calculations, logical operators and bit settings. These can easily be linked to each other or to other data within the project using ladder or macro functionality.

- Screen open macro
- Screen close macro
- Cyclic macro
- Initial application macro
- Clock macro
- Macros triggered by digital signals
- Sub-macros that can be triggered from other macros



H-K30



H-T50



H-T60



Communication drivers

To accompany this inspiring range of HMIs is a range of free of charge communication drivers. This increasing list of drivers totals over a 100 and can be used for connecting the HMIs to various automation equipment such as PLCs, inverters, and servo controllers. Main worldwide brands such as Siemens, Omron and Allen Bradley are already included and new drivers are continuously being developed and updated.

Multi-language support

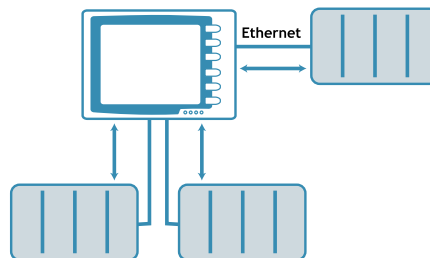
Making it easy for manufacturers who export all over the world, multi-language support allows the configurator to develop projects that can be used basically anywhere. With this setup within the HMI, to change languages is just a switch away. The language can also be changed during normal operation so that each operator can decide what language to use.

- Develop the application in up to 5 different languages
- Switch languages freely during normal operation

Multi-channel communication

Multi-channel communication is a unique feature that allows a different controller to be connected on each serial or Ethernet port. This flexible communications solution not only saves on buying multiple HMIs, but also removes the need for expensive protocol converters.

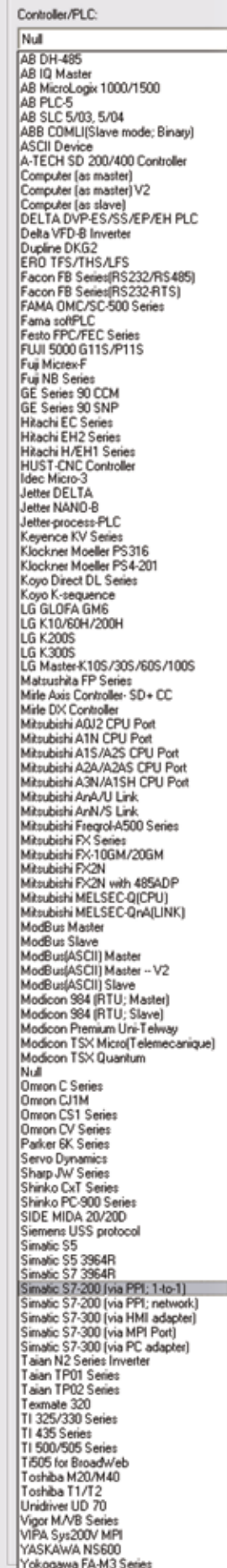
- Connect a controller to each available port either via serial or Ethernet connection
- Move values between the drivers via macros
- Use values from several controllers in calculations



File protection

Protecting the application from unauthorized upload and download is essential in today's manufacturing world. The "File Protection" feature ensures that only authorized users can access sensitive information.

- Impossible to upload the protected application from the terminal without the correct password

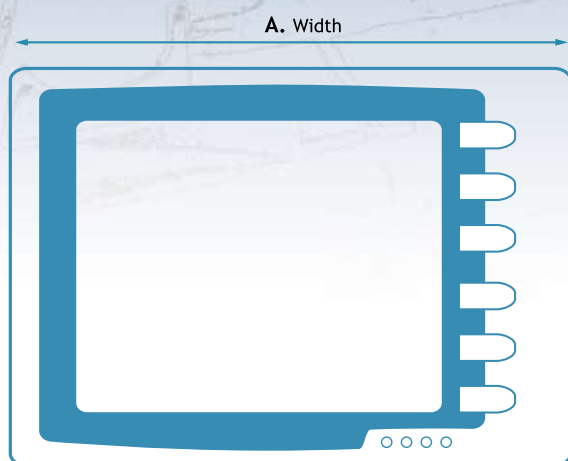


The list of drivers is continuously updated.

H-series overview



	H-K30m-S	H-T60b-S	H-T60b-P	H-T60b-N	H-T60c-S	H-T60c-P	H-T60c-N
LCD Type	Mono STN LCD	Mono STN LCD			Color STN LCD		
Screen size	3" (diagonal)	5.7" (diagonal)					
Display resolution	160 x 80	320 x 240					
Brightness (cd/m2)	36	110			300		
CPU	32 bits RISC	32 bits RISC					
Contrast adjustment	Via VR	Via touch panel and VR on the back					
Display colors	16 shades of gray	16 shades of blue			256 colors		
Back light type	LED	CCFL					
Back light life	75,000 hours	50,000 hours			75,000 hours		
Operation Status LED	PWR & COM2 LEDs	PWR, COM1, COM2, Ethernet LEDs					
Touch screen	–	Analog					
Touch screen (number of times)	> 500,000	> 1,000,000					
Keypad	16 mechanical switches	1 Menu key and user-defined function keys (F1–F5)					
Application Flash ROM	4MB	4MB					
RTC (w/replaceable lithium battery)	Yes	Yes					
Data/Recipe	–	–	512 KB	–	–	512 KB	–
Data storage (CF card)	–	–					
COM1	–	9-pin female (RS232/RS485)					
COM2	9-pin female (RS232/RS422/RS485)	25-pin female (RS232/RS422/RS485)					
COM3	–	–					
USB Host	–	–					
USB Device	–	–					
Multi-functional port	–	–	26-pin connector for printer	–	–	26-pin connector for printer	–
Ethernet	–	–	–	Yes	–	–	Yes
Network interface unit	–	LonWorks					
Certification	CE	CE					
External dimensions (mm)	173.0 (W) x 105.5 (H) x 56.0 (D)	195.0 (W) x 145.0 (H) x 60.0 (D)					
Cut-out dimensions (mm)	160.8 x 93.3	185.8 x 135.8					
Supply voltage	24V DC ±15 %, 8 W	24V DC ±15 %, 20 W					
Front protection	IP65	IP65					
Weight (kg)	0.65	0.81					



External dimensions, A x B x C

H-K30	173.0 x 105.5 x 56.0 mm
H-T50	170.3 x 102.6 x 44.6 mm
H-T60	195.0 x 145.0 x 60.0 mm
H-T80	231.0 x 176.0 x 46.8 mm
H-T100	297.0 x 222.0 x 52.3 mm



H-series overview



	H-T50b-S	H-T80c-P	H-T80c-N	H-T100t-P	H-T100t-N
LCD Type	Mono STN LCD	Color STN LCD		Color TFT LCD	
Screen size	4.7" (diagonal)	7.5" (diagonal)		10.4" (diagonal)	
Display resolution	240 x 128	640 x 480			
Brightness (cd/m ²)	110	350			
CPU	32 bits RISC	32 bits RISC			
Contrast adjustment	Via touch panel	Via touch panel		-	
Display colors	16 shades of blue	256 colors			
Back light type	CCFL	CCFL			
Back light life	50,000 hours	45,000 hours		50,000 hours	
Operation Status LED	PWR & COM1, COM2 LEDs	PWR, COM1-3, Ethernet LEDs		PWR, COM1-3, Ethernet LEDs	
Touch screen	Analog	Analog			
Touch screen (number of times)	> 1,000,000	> 1,000,000			
Keypad	-	1 Menu key and user-defined function keys (F1-F6)		1 Menu key and user-defined function keys (F1-F7)	
Application Flash ROM	4MB	4MB			
RTC (w/replaceable lithium battery)	Yes	Yes			
Data/Recipe	-	512 KB			
Data storage (CF card)	-	Yes		Yes	
COM1	9-pin female (RS232/RS485)	9-pin female (RS232/RS485)			
COM2	9-pin female (RS422/RS485)	25-pin female (RS232/RS422/RS485)			
COM3	-	9-pin female (RS422/RS485)		9-pin female (RS422/RS485)	
USB Host	-	2		2	
USB Device	-	1		1	
Multi-functional port	-	-			
Ethernet	-	Yes		Yes	
Network interface unit	-	-		-	
Certification	CE	CE			
External dimensions (mm)	170.3 (W) x 102.6 (H) x 44.6 (D)	231.0 (W) x 176.0 (H) x 46.8 (D)		297.0 (W) x 222.0 (H) x 52.3 (D)	
Cut-out dimensions (mm)	160.7 x 93.0	220.8 x 165.8		286.0 x 211.0	
Supply voltage	24V DC ±15 %, 12 W	24V DC			
Front protection	IP65	IP65			
Weight (kg)	0.47	1.20		1.90	

The H-series consists of various models and versions

H-T50d-V

T: Type (T: Touch K: Key)

S: Size (Inch)

d: Display (c: color t: TFT m: mono b: blue mode)

V: Version (S: standard P: plus N: network)

Standard version

Includes most software and hardware requirements for an operator terminal, such as alarm handling, Windows™ fonts, multi-language support, animated graphics and macro/ladder features.

Plus version

Has the same functionality as the Standard version as well as data/recipe handling and a communication port for a printer or external keyboard.

Network version

The network version is a Plus version with an integral Ethernet networking port.

About Beijer Electronics

Beijer Electronics HMI Products has over 20 years of experience connecting people with the processes they control. Our HMI solutions are built on extensive automation knowledge, yet they handle industrial applications with everyday ease. Used with simple intuition, they set machines, information and ideas in motion.

HMI Products is part of the Beijer Electronics group, which is listed on the Stockholm Stock Exchange and based in Malmö, Sweden. The group has subsidiaries in Norway, Finland, Germany, Taiwan and the United States, as well as close relationships with OEMs, brand-label partners and distribution partners worldwide. For the representative nearest you, visit www.beijerelectronics.com

FROM PERSON TO PROCESS.



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