



## HumanMachineInterfaces



Designed to meet a wide range of applications, all Kaspro Human Machine Interfaces are offered in a large variety of models and screen sizes. As in any family there are certain aspects each of the members have in common.

Kaspro Group HMIs operate of one uniform configuration software package supporting all of our operator interfaces. The advantages of a uniform software package approach are evident in aspects as ease of use or the harmonized application exchange between various models, to name a few. Software is at the heart of our HMIs and always free available to every user.

Kaspro Human Machine Interfaces also share a 36-month factory warranty applicable to all family members. Kaspro HMIs are made to perform and last, yet at the same time perfectly fit each project budget.



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# Human Machine Interfaces



Screen	Model	CPU Speed	USB Ports	Serial Ports	Ethernet Ports	Software
4.3"	Gemini A	400Mhz.	1 Port	2 Ports	N/A	Included
4.3"	Gemini B	400Mhz.	1 Port	2 Ports	N/A	Included
5.6"	Galaxy-56	400Mhz.	1 Port	2 Ports	N/A	Included
5.6"	Castor-56	520Mhz.	2 Ports	2 Ports	1 Port	Included
7.0" Wide	Galaxy-70WN	400Mhz.	1 Port	2 Ports	N/A	Included
7.0" Wide	Galaxy-70WNL	400Mhz.	1 Port	2 Ports	1 Port	Included
8.0"	Castor-80	520Mhz.	3 Ports	3 Ports	1 Port	Included
10.1" Wide	Galaxy-101W	400Mhz.	1 Port	2 Ports	1 Port	Included
10.1" Wide	Galaxy-101WL	400Mhz.	1 Port	2 Ports	1 Port	Included
10.4"	Castor-104	520Mhz.	3 Ports	3 Ports	1 Port	Included
12.1"	Castor-121	520Mhz.	3 Ports	3 Ports	1 Port	Included
15.0"	Castor-150	520Mhz.	3 Ports	3 Ports	1 Port	Included

## Widescreen HMIs

Widescreen technology is the most rapid growing design trend in the HMI and Industrial PC / Monitor market. With the release of the newest Galaxy models we provide two of the most popular display sizes in Widescreen Format.

The Galaxy-70WN with its 7.0" (16:9) high resolution TFT color touchscreen and the Galaxy-101W with a 10.1" (16:9) format screen meet the style, format and price requirements in most industrial automation and building control environments.



A full 36-month factory warranty free-of-charge software and a "best-market-price" guarantee are standard standard on all our Operator Interface products.



## Free Configuration Software

If you cannot use a product without the required software, should the software than not be included in the product and delivered as one package, all-included , all-in-one price? We believe it should, and that is why our KA- software is free-included in each of our HMI products.

Free, but powerful! KA-Software is flexible, easy to work with and loaded with all the right features needed to build just the right applications.

No demo programs! Our software is available for download from the Kaspro website. Not a limited demo version, not a time restricted or partially feature disabled version. Your software download puts you in control and at full working speed right from the start!

Never worry about getting the latest software version. All future software versions are available to you at no charge via our website. Never again pay for software upgrades.



## 100+ Drivers & MPI, Profibus and CANopen cards

More than 100 drivers are standard included part of the software, connecting to most popular controllers. Still in need of a 'custom-driver'? No problem, we will work with you to develop it.



# GEMINI SERIES

## 4.3" TFT Touchscreen Operator Panel

**BEST PRICED  
FREE SOFTWARE  
ULTRA SLIM PROFILE  
36 - MONTH WARRANTY  
CUSTOM LOGO AT START-UP**

### **THE SMALLEST BIG PERFORMER IN THE HMI MARKET...**

Kaspro understands the OEM need for a slim profile, small footprint, yet powerful HMI. We also realize the crucial demand to keep pricing at a level suitable for small / economical machines or as a replacement for analog controls.

We all understand that without software the HMI will not work. So why is it that some brands price their software as a separate item? Not at Kaspro. All our operator panels come with free of charge software!



## KEY SPECS

Gemini A	: Touchscreen only
Gemini B	: A + 8 Function Keys
Processor	: 32-Bit 400MHz. RISC
Display	: TFT Touchscreen
Screen Size	: 4.3" diagonal
Resolution	: 480 x 272
Colors	: 65,536 Colors
Contrast	: 450:1
RTC	: Included (battery backed)
Serial Ports	: 2
USB Port	: 1 (Client)
Warranty	: 36 Months
Size:	: 151 x 86 x 51mm
Cut-Out	: 145 x 81 mm
Temperature:	: -4F(-20°C) ~ 131F(55°C)
Software	: Free

Customize it! It is your machine or application, should it not also display your brand name or logo as the HMI powers up? Our clients asked for complete integration / customization of their HMI. We reacted and have included a software feature allowing users the option to show any image or logo of choice as the HMI starts up.

The Gemini Series is based on the fast 400MHz processor, a high specification TFT touchscreen supporting 65,536 vivid colors, high speed USB downloading and two serial ports enclosed in an industrial grade IP65 / NEMA4 housing.

A battery secured recipe backup and Real Time Clock are just a few of the standard features.



# Gemini-A / Gemini-B

## 4.3" TFT WIDESCREEN HMI



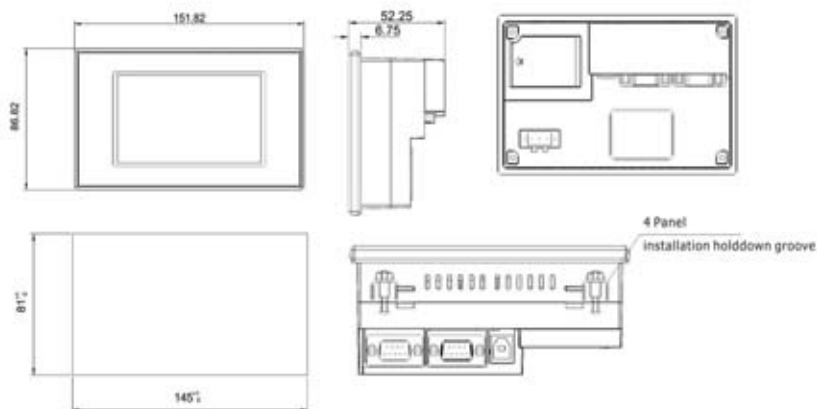
4.3" TFT Widescreen Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display (model A)	4.3" TFT
Display (model B)	4.3" TFT & 8 Function Keys
Resolution	480*272 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	400cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	16MB FLASH, 8MB SDRAM
Recipe Memory & RTC	256KB & RTC
Warranty	36 Months
USB Client Port	1 USB Slave Download Port
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Landscape mode	Yes
Portrait mode	Yes

Rated power	4.8 W
Rated voltage	DC24V
Input range	DC21 ~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-20~55C
Operating humidity	10~90% non-condensing
Storage temperature	-25~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	151.8×86.8X52.3mm
Cutout size(mm)	145×81mm
Weight	0.70kg

### Dimensions



# GALAXY SERIES

## 5.6" TFT Touchscreen Operator Panel

400MHz CPU  
65,536 COLORS  
FREE SOFTWARE  
36 MONTH WARRANTY



### 5.6" COLOR TFT TOUCHSCREEN OPERATOR INTERFACE

The Galaxy Series 5.6" model was designed to be the operator panel of choice in process control, machine-building, water treatment, building automation, printing, packaging and other industrial automation applications.

In day-to-day practice the Galaxy-56 has also taken a leading role in replacing existing, similar screen size, operator terminals in projects demanding replacement due to warranty, damage or upgrade needs. Similar in panel cut-out size, free configuration software, optional display of a custom logo at power-on and a guaranteed best market price, uniquely position the Galaxy-56.



Guaranteed best priced --, and including KA-software, the Galaxy-56 offers instant major savings over most other brands.

The slim-profile design requires just 2" (52mm) of depth.

Unique to the Galaxy-56 (and all other Kaspro operators panels) is a standard software option allowing the user to set any logo or image of his choice be displayed during initial power-up.

In contrary to nearly all other HMI suppliers, we decided to provide all our HMIs without a Kaspro logo on the front bezel. We understand that our products become part of a greater application, installation or machine. Having the option to blend in is highly appreciated by most users.

Over 100 communication drivers to most of the popular controllers provide flawless connectivity. In addition, custom drivers can be developed on demand at no extra cost.

## KEY SPECS

Model	: Galaxy-56
Processor	: 400MHz. CPU
Display	: TFT Touchscreen
Screen Size	: 5.6" Diagonal
Resolution	: 320 x 234
Colors	: 65,536 Colors
Serial Ports	: 2
USB Port	: 1 (Slave)
Printer Port	: 1
Warranty	: 36 Months
Size	: 204 x 150 x 52 mm
Cut-Out	: 192 x 138 mm

**KASPRO HMI  
SOFTWARE  
IS ALWAYS:**



# Galaxy-56

## 5.6" TFT Touchscreen HMI



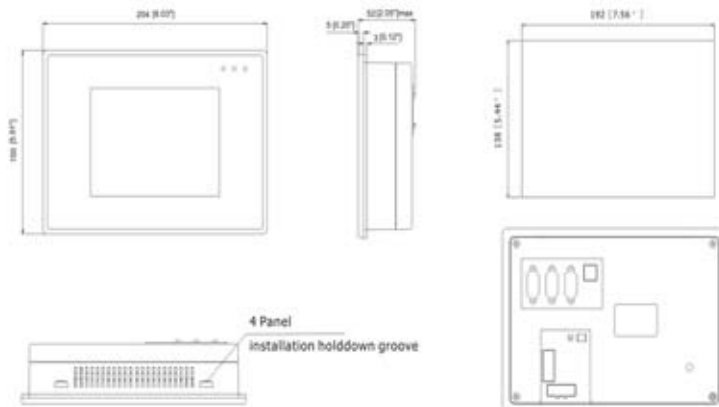
5.6" TFT Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	5.6" TFT Touchscreen
Free Software	Yes
Resolution	320*240 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	300cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	16MB FLASH, 8MB SDRAM
Recipe Memory & RTC	256KB & RTC
Warranty	36 Months
USB Client Port	1 USB Slave Download Port
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Landscape mode	Yes
Portrait mode	Yes

Rated power	9.6 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-20~55C
Operating humidity	10~90% non-condensing
Storage temperature	-25~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	204×150X52mm
Cutout size(mm)	192×138mm
Weight	0.85kg

### Dimensions



# GALAXY SERIES WIDESCREEN

## 7.0" / 10.1" Widescreen Operator Panels



### HIGH DEFINITION, WIDESCREEN HMI SERIES

Take full advantage of the high resolution capability the Galaxy Widescreen operator panels offer and display spectacular application screens or images on any of our 7.0" or 10.1" TFT touchscreen models.

The bright (320cd/m<sup>2</sup>) screen supports 65,536 colors and is enclosed in an IP65 / NEMA4 rated industrial grade housing.

Standard USB Host and Slave ports, 3 serial ports, optional Ethernet port and a dedicated printer port provide solid communication and connectivity.



The right price! Putting together an impressive feature selection, adding high specification widescreens, a powerful CPU, all the ports you need and packing this into an industrial grade housing is just one side of the story. The real deal is being able to offer it

at an unbeatable price and on top of this include the software for free!

All Galaxy Widescreen Series models are priced to meet your budget needs and project demands

## CUSTOMIZE IT !

It is your machine or application, should it not also display your brand name or logo as the HMI powers up?

Our clients asked for complete integration / customization of their HMI. We reacted and have included a software feature offering the option to show any image or logo of choice at power-on.

We also decided to provide all HMIs without our logo on the front bezel. The result in an even better "blend-in" of the terminal into the overall look of any OEM product or application,

## KEY SPECS

Screen Sizes : 7.0" / 10.1" Wide  
Screen Style : TFT Widescreen  
Touchscreen : Yes  
Colors : 65,536 Colors  
Brightness : 320cd/m<sup>2</sup>  
Resolution : 800 x 480

Processor : 400MHz. CPU  
Serial Ports : 3 (some models)  
USB Ports : 3 (some models)  
Ethernet Port : 1 (some models)  
Printer Port : 1  
Warranty : 36 Months

Over 100 communication drivers to most of the popular controllers ensure flawless connectivity. In addition, custom drivers can be developed on demand at no extra cost.

Industrial grade products are designed to last and perform. We believe the warranty should reflect the durability. All Kaspro products are covered by a 36-month warranty.

We care! Environmental friendly production techniques, energy efficient product with a longer operational expectation

# GALAXY-70WN

## 7.0" TFT WIDESCREEN HMI



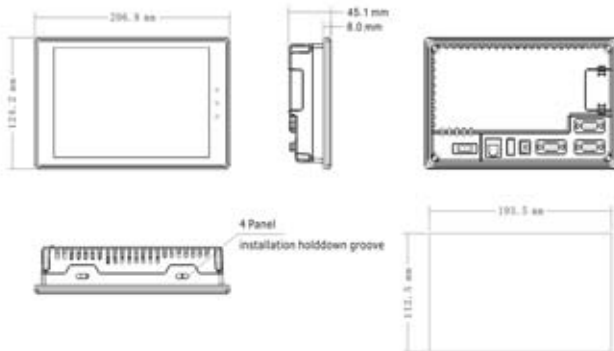
7.0" TFT Widescreen (16:9) Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	7.0" (16:9) TFT Widescreen
Resolution	800*480 Pixels / 152x92mm
Touchscreen	4-wire precision resistance
Colors	65,356 Colors
Brightness	300cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	32MB FLASH, 64M SDRAM
Recipe Memory & RTC	256KB & RTC
Warranty	36 Months
Ethernet Port	No
USB Client Port	1 USB Slave Download Port
COM 0	RS232/RS485-2/RS485-4
COM 1	RS232/RS485-2/RS485-4
COM 2	RS232

Rated power	8.0 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-10~50C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	206.8×124.2×45.1mm
Cutout size(mm)	193.5×112.5mm
Weight	0.70kg

### Dimensions



# GALAXY-70WNL (Ethernet)

## 7.0" TFT WIDESCREEN HMI



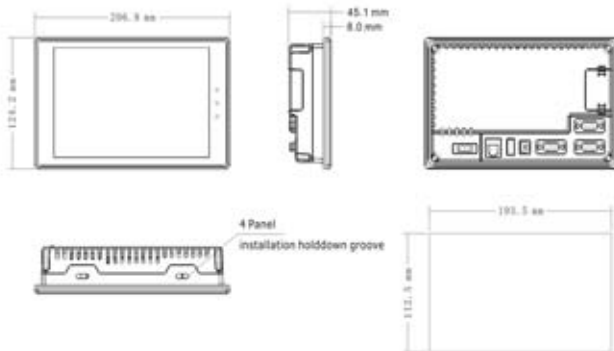
7.0" TFT Widescreen (16:9) Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	7.0" (16:9) TFT Widescreen
Resolution	800X480 Pixels / 151x92mm
Touchscreen	4-wire precision resistance
Colors	65,356 Colors
Brightness	300cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	32MB FLASH, 64M SDRAM
Recipe Memory & RTC	256KB & RTC
Warranty	36 Months
Ethernet Port	Yes
USB Port	1 USB Client Download Port
Printer Port	1 DB25 Port
COM 0/1	RS232/RS485-2/RS485-4
COM 2	RS232

Rated power	8.0 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-10~50C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	206.8×124.2X45.1mm
Cutout size(mm)	193.5×112.5mm
Weight	0.70kg

### Dimensions



# GALAXY-101W

## 10.1" TFT WIDESCREEEN HMI

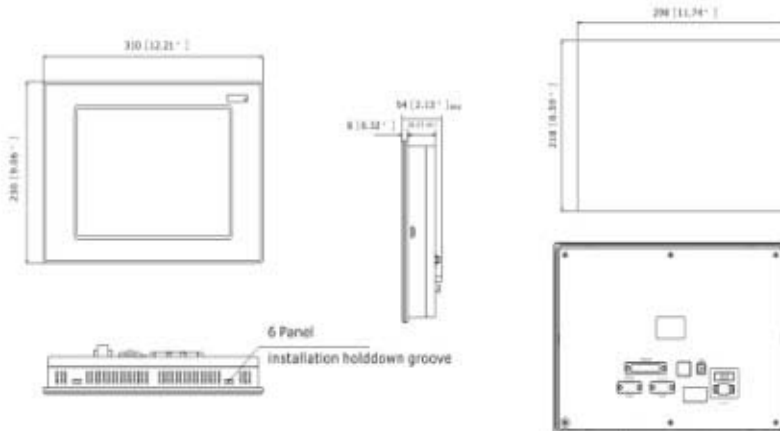


10.1" TFT Widescreen (16:9) Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	10.1" (16:9) TFT Widescreen
Resolution	800*480 Pixels / 220x132mm
Touchscreen	4-wire precision resistance
Colors	65,356 Colors
Brightness	320cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	32MB FLASH, 64M SDRAM
Recipe Memory & RTC	512KB & RTC
SD Memory Card Slot	1 SD Card Slot (8GB)
Ethernet Port	No
USB Client Port	2 USB Client Download Ports
USB Slave Port	1 USB Slave Download Port
Serial Port	2 Serial Ports
Printer Port	1 DB25

Rated power	8.0 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-10~50C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	310*230X58mm
Cutout size(mm)	298*218mm
Weight	2.0kg



# GALAXY-101WL (Ethernet)

## 10.1" TFT WIDESCREEN HMI



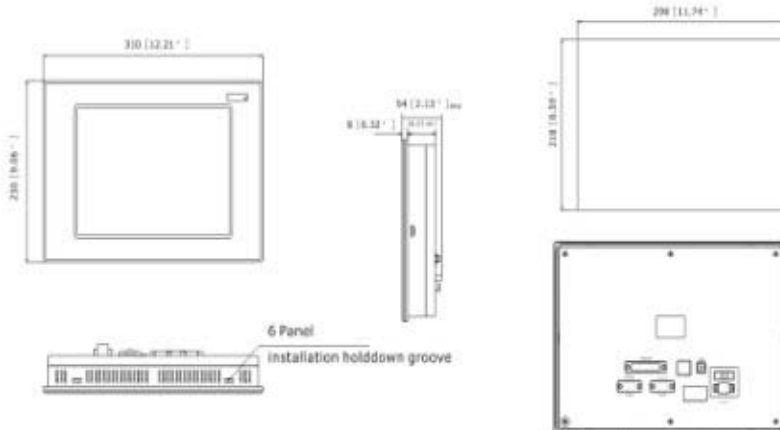
10.1" TFT Widescreen (16:9) Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	10.1" (16:9) TFT Widescreen
Resolution	800*480 Pixels / 220x132mm
Touchscreen	4-wire precision resistance
Colors	65,356 Colors
Brightness	320cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 400MHz
Memory	32MB FLASH, 64M SDRAM
Recipe Memory & RTC	512KB & RTC
SD Memory Card Slot	1 SD Card Slot (8GB)
Ethernet Port	Yes
USB Client Port	2 USB Client Download Ports
USB Slave Port	1 USB Slave Download Port
Serial Port	2 Serial Ports
Printer Port	1 DB25

Rated power	8.0 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<5ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-10~50C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Black
Housing material	Industrial Grade ABS
HousingDimensions(mm)	310*230X58mm
Cutout size(mm)	298*218mm
Weight	2.0kg

### Dimensions





# CASTOR SERIES

## High Performance TFT Touchscreen HMI

**520 MHz CPU  
FREE SOFTWARE  
VIDEO CAPABILITY  
36 - MONTH WARRANTY  
CUSTOM LOGO AT START-UP  
ETHERNET, SERIAL AND USB PORTS**

### CASTOR SERIES:

**"RAISING THE STANDARD ..."**

At the heart of each Castor high performance touchscreen HMI sits a blazing fast Xscale 520 MHz CPU ready to deliver all the speed and power needed to handle complex tasks or application rapidly.

Power, Performance and Price put the Castor Series ahead of the market. Three USB ports, two serial ports, an Ethernet port and optional Profibus, MPI and CANopen communication cards allow for swift and easy connectivity.

Simultaneous data communication, via multiple ports, to multiple controllers, running different protocols is just one of the many tasks Castor HMIs perform. Remote data download, trouble shooting or remote monitoring is another one of the power-options built-into the HMI.

The Castor Series continues when other HMI models have long given up. More than just bright, high impact, graphics, the Castor 12" and 15" models are also video enabled..

Sixteen levels of password protection and the option to offload security information to data storage devices as a memory card comes as a standard.



The Castor Series allows users to select any of five models, starting with a 5,6" display and as large as a 15.0" screen size. Each screen is set to provide superior viewing quality in high pixel resolutions.

Customize it! It is your machine or application, should it not also display your brand name or logo as the HMI powers up? Our clients asked for complete integration / customization of their HMI. We reacted and have included a software feature allowing users the option to show any image or logo of choice as the HMI starts up.

The Castor is the HMI of choice in control, OEM, building automation, water treatment, printing, packaging, bottling and many other process or industrial automation applications

## OVERVIEW

Model	Screen Size	CPU	Ethernet Ports	USB Ports	Serial Ports	Factory Warranty	Configuration Software
Castor-56	5.6"	520Mhz.	1	3	2	36 Months	Free
Castor-80	8.0"	520Mhz.	1	3	2	36 Months	Free
Castor-104	10.4"	520Mhz.	1	3	2	36 Months	Free
Castor-121	12.1"	520Mhz.	1	3	2	36 Months	Free
Castor-151	15.1"	520Mhz.	1	3	2	36 Months	Free

# Castor-56

## 5.6" High Performance HMI



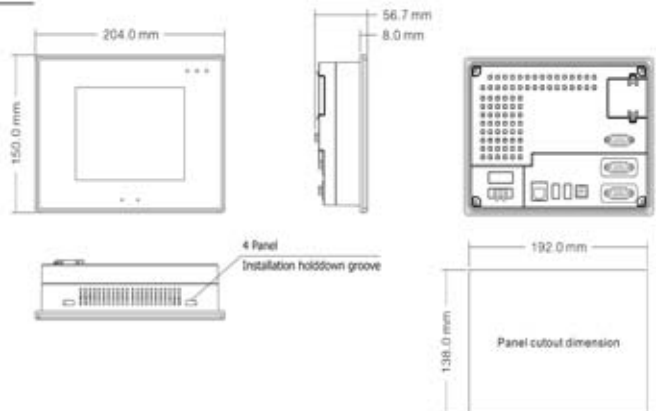
5.6" TFT High Performance Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	5.6" TFT Touchscreen
Configuration Software	KA-software included
Resolution	320*234 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	300cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 520MHz
Memory	16MB FLASH, 8MB SDRAM
Expandable Memory	SD Card / U-Disk
Recipe Memory & RTC	512KB & RTC
Warranty	36 Months
Ethernet Port	1 Ethernet Port
USB Slave Port	1 USB Slave Download Port
USB Master Port	2 USB Master Ports
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Printer Port	Yes, via USB
CANopen Port	Yes, on Castor-56CAN model
Profibus DP Port	Yes, on Castor-56DP model
Siemens MPI Port	Yes, on Castor-56MPI model

Landscape mode	Yes
Portrait mode	Yes
Rated power	7.2 W
Rated voltage	DC24V
Input range	DC21~DC28V
Power down allowed	<3ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	0~45C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Grey
Housing material	Industrial Grade ABS
HousingDimensions(mm)	204×150X56.7mm
Cutout size(mm)	192×138mm
Weight	0.96kg

### Dimensions



# Castor-80

## 8.0" High Performance HMI



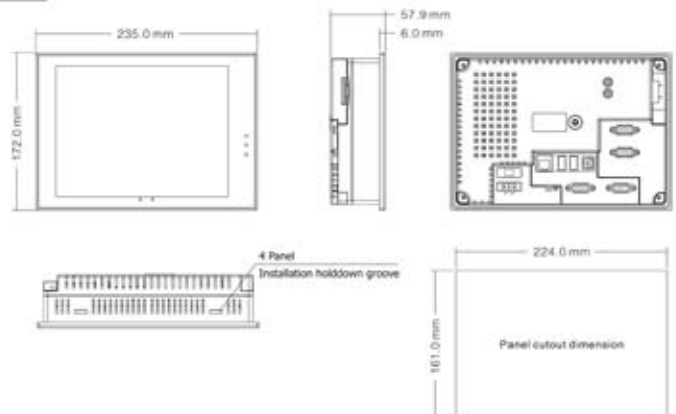
8.0" TFT High Performance Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	8.0" TFT Touchscreen
Configuration Software	KA-software included
Resolution	640*480 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	350cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 520MHz
Memory	16MB FLASH, 8MB SDRAM
Expandable Memory	SD Card / U-Disk
Recipe Memory & RTC	512KB & RTC
Warranty	36 Months
Ethernet Port	1 Ethernet Port
USB Slave Port	1 USB Slave Download Port
USB Master Port	2 USB Master Ports
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Printer Port	Yes, via USB
CANopen Port	Yes, on Castor-56CAN model
Profibus DP Port	Yes, on Castor-56DP model
Siemens MPI Port	Yes, on Castor-56MPI model

Audio Out Interface	Yes
Landscape mode	Yes
Portrait mode	Yes
Rated power	10.8W
Rated voltage	DC24V
Input range	DC21 ~ DC28V
Power down allowed	<3ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	0~45C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Grey
Housing material	Industrial Grade ABS
HousingDimensions(mm)	235×172X57.9mm
Cutout size(mm)	224×161mm
Weight	1.27kg

### Dimensions



# Castor-104

## 10.4" High Performance HMI



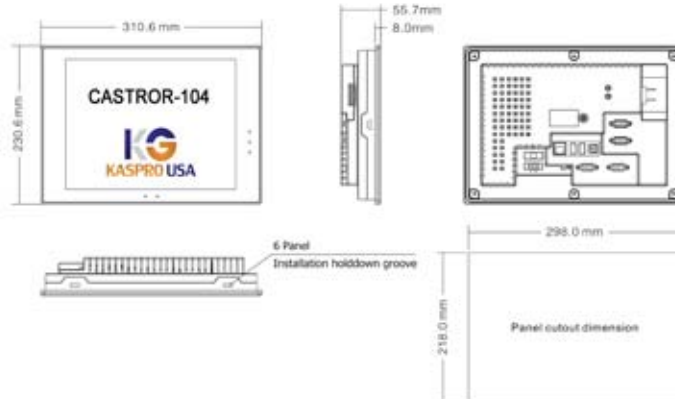
10.4" TFT High Performance Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	10.4" TFT Touchscreen
Configuration Software	KA-software included
Resolution	640*480 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	400cd/m2
Backlight	LED
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 520MHz
Memory	16MB FLASH, 8MB SDRAM
Expandable Memory	SD Card / U-Disk
Recipe Memory & RTC	512KB & RTC
Warranty	36 Months
Ethernet Port	1 Ethernet Port
USB Slave Port	1 USB Slave Download Port
USB Master Port	2 USB Master Ports
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Printer Port	Yes, via USB
CANopen Port	Yes, on Castor-56CAN model
Profibus DP Port	Yes, on Castor-56DP model
Siemens MPI Port	Yes, on Castor-56MPI model

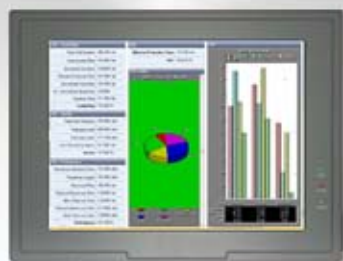
Audio Out Interface	Yes
Landscape mode	Yes
Portrait mode	Yes
Rated power	12.0W
Rated voltage	DC24V
Input range	DC21 ~ DC28V
Power down allowed	<3ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	0~45C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Grey
Housing material	Industrial Grade ABS
HousingDimensions(mm)	310.6*230.6X55.7mm
Cutout size(mm)	298*218mm
Weight	2.0 kg

### Dimensions



# Castor-121

## 12.1" High Performance HMI



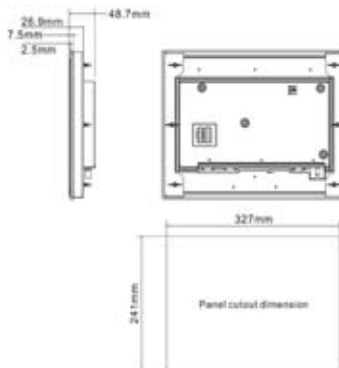
12.1" TFT High Performance Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	12.1" TFT Touchscreen
Configuration Software	KA-software included
Resolution	640*480 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	300cd/m2
Backlight	2 CCFL
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 520MHz
Memory	16MB FLASH, 8MB SDRAM
Expandable Memory	SD Card / U-Disk
Recipe Memory & RTC	512KB & RTC
Warranty	36 Months
Ethernet Port	1 Ethernet Port
USB Slave Port	1 USB Slave Download Port
USB Master Port	2 USB Master Ports
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Printer Port	Yes, via USB
CANopen Port	Yes, on Castor-56CAN model
Profibus DP Port	Yes, on Castor-56DP model
Siemens MPI Port	Yes, on Castor-56MPI model

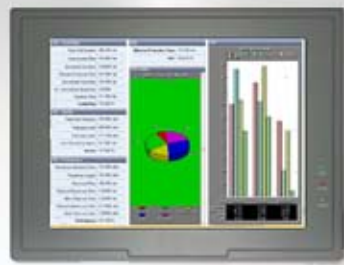
Video Interface	2 PAL inputs, BNC connector
Audio Out Interface	Yes
Landscape mode	Yes
Portrait mode	Yes
Rated power	15.2W
Rated voltage	DC24V
Input range	DC21 ~DC28V
Power down allowed	<3ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-10~65C
Operating humidity	10~90% non-condensing
Storage temperature	-20~70C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Grey
Housing material	Aluminium Alloy ABS
HousingDimensions(mm)	350*264X48.7mm
Cutout size(mm)	327*241mm
Weight	4.3 kg

### Dimensions



# Castor-150

## 15.0" High Performance HMI



15.0" TFT High Performance Touchscreen HMI  
KA-software package pre-installed.

### Specifications

Display	15.0" TFT Touchscreen
Configuration Software	KA-software included
Resolution	1024*768 Pixels
Touchscreen	4-wire precision resistance
Colors	65,536 Colors
Brightness	300cd/m2
Backlight	2 CCFL
Backlight life span	50,000 Hours
Processor	32-bit RISC CPU 520MHz
Memory	16MB FLASH, 8MB SDRAM
Expandable Memory	SD Card / U-Disk
Recipe Memory & RTC	512KB & RTC
Warranty	36 Months
Ethernet Port	1 Ethernet Port
USB Slave Port	1 USB Slave Download Port
USB Master Port	2 USB Master Ports
Serial Ports	2 ports (RS232/RS485-2/RS485-4)
Printer Port	Yes, via USB
CANopen Port	Yes, on Castor-56CAN model
Profibus DP Port	Yes, on Castor-56DP model
Siemens MPI Port	Yes, on Castor-56MPI model

Video Interface	2 PAL inputs, BNC connector
Audio Out Interface	Yes
Landscape mode	Yes
Portrait mode	Yes
Rated power	16.8W
Rated voltage	DC24V
Input range	DC21 ~DC28V
Power down allowed	<3ms
Insulation resistance	Greater than 50MΩ@ 500V DC
Dielectric strength test	500 VAC 1 minute
Operating temperature	-0~50C
Operating humidity	10~90% non-condensing
Storage temperature	-10~60C
Storage humidity	10~90% non-condensing
Shockproof test	10~25Hz (X,Y,Z dir. 2G, 30 min.)
Housing color	Grey
Housing material	Aluminium Alloy ABS
HousingDimensions(mm)	406.5×313.5X48.3mm
Cutout size(mm)	387.5×294.5mm
Weight	5.1 kg

### Dimensions

