

OPERATOR PANELS

HMI

VISUAL



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VISUAL OPERATOR PANELS HMI

The **VISUAL** touchscreen operator panels are suitable to meet every application need, from small automations to the control of complex industrial processes.

With 4.3", 7", 9.7", 10.1", 15" display and widescreen format they allow more information to be displayed compared to a traditional display, ensuring at the same time the containment of external dimensions.

The operator panels can be freely oriented horizontally or vertically, depending on the requirements of the application. The displays are TFT up to 16 million colours with LED backlight and high resolution.

The **VISUAL** terminals are designed to be installed in the harshest

environmental conditions thanks to the front panel with IP65/66 protection rating.

The **VISUAL** range can be customised through the EASY BUILDER PRO design environment with a powerful editor and a simple and intuitive user interface. Through Ethernet, USB, RS232, RS485 communication interfaces, with the support of the RTU / TCP-IP ModBUS protocols, the terminals can be combined with the most widely-used industrial controllers and with other supervision and automation systems.

TECHNICAL DATA

	VISUAL1E	VISUAL2E	VISUAL3	VISUAL4
				
	Touchscreen HMI terminal 4.3" colour widescreen, Ethernet interface	7" touchscreen HMI terminal colour widescreen, interface Ethernet	4.3" HMI touchscreen colour widescreen, Ethernet interface	7" HMI touchscreen Terminal colour widescreen, Ethernet interface
DISPLAY				
Sample	4.3" TFT LCD	7" TFT LCD	4,3 " TFT LCD	7" TFT LCD
Resolution	480x272	800x480	480x272	800x480
Format	16:9	16:9	16:9	16:9
Brightness	500 cd/m2	350 cd/m2	500 cd/m2	350 cd/m2
Contrast	500:1	500:1	500:1	500:1
Backlight	LED > 30,000 hours	LED > 30,000 hours	LED, > 30,000 hours	LED, > 30,000 hours
Colours	65536	65536	16 million	16 million
Touchscreen	4 wires, resistive	4 wires, resistive	4 wires, resistive	4 wires, resistive
Accuracy	±2%	±2%	±2%	±2%
CONNECTIONS				
USB 2.0	1	1	1	1
Ethernet 10/100	1	1	1	1
Ethernet 10/100/1000	-	-	-	-
COM1	RS232	RS232	RS232	RS232
COM2	RS485	RS485	RS485	RS485
COM3	-	-	-	-
GENERAL DATA				
Flash	128 MB	128 MB	128 MB	128 MB
RAM	128 MB	128 MB	128 MB	128 MB
Processor	Cortex A8 600MHz	Cortex A8 600MHz	32 bit RISC Cortex A8 600 MHz	32 bit RISC Cortex A8 600 MHz
RTC	Integrated	Integrated	Integrated	Integrated
Power supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	400mA @ 24 Vdc	500mA @ 24 Vdc	300mA @ 24 Vdc	350mA @ 24 Vdc
Case	Plastic	Plastic	Plastic	Plastic
Dimension	128 x102 x 32 mm	200.4 x146.5 x 34 mm	128 x102 x 32 mm	200.4 x146.5 x 34 mm
Hole dimension	119x93 mm	192x138 mm	-	-
Weight	250 g	520 g	250 g	600 g
Operating temperature	0..50°C	0..50°C	0..50°C	0..50°C
Protection degree	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65
Certification	EC	EC	EC	EC, UL508 Type 4X
CONFIGURATION AND PROGRAMMING				
Programming tool	EASY BUILDER PRO	EASY BUILDER PRO	EASY BUILDER PRO	EASY BUILDER PRO
Remote access	-	-	-	-
CABLES				
CS-DB9F-TIP-V	x	x	x	-
CS-DB9M-TIP-V	-	-	-	x
CE-RJ45-RJ45-R	x	x	x	x

The technical data and the diagrams in this document are indicative and not binding.

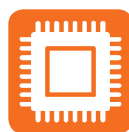
VISUAL OPERATOR PANELS HMI



High resolution TFT display
up to 16 million colours, LED back-lit



Processors
RISC 400 MHz
CORTEX A8 /600 /
800 MHz / 1 GHz



Flash Memory
128 / 256 MB / 512 MB
Recipes memory
256kB



Communication
RS232 / RS485
and Ethernet with
support for ModBUS
RTU and TCP-IP
ModBUS protocols



Certifications
EC and UL



Industrial strength
with degree of
protection NEMA4/
IP65 /IP66
front



Programming tool
Windows with
evolved editing
functionality



Touchscreen
4-wire resistive

TECHNICAL DATA

VISUAL4T



7" HMI touchscreen Terminal
colour widescreen, Ethernet
interface, aluminium case

VISUAL5-PC



7" HMI touchscreen Terminal
16:9, 64k colours, TFT LCD,
Ethernet interface, version
replica HMI / Web Server,
CHROMIUM function

VISUAL5-WB



7" HMI touchscreen Terminal
16:9, 64k colours, TFT LCD,
Ethernet interface, version
spare part S6001-PC

VISUAL6



7" touchscreen HMI terminal
colour widescreen, double
Ethernet interface

VISUAL7N



7" HMI touchscreen terminal
colour widescreen, Ethernet
interface

DISPLAY

Sample	7" TFT LCD	7" TFT	7" TFT	7" TFT LCD	10.1" TFT LCD
Resolution	800x480	800X480	800X480	800x480	1024x600
Format	16:9	16:9	16:9	16:9	16:9
Brightness	350 cd/m2	200 cd/m2	200 cd/m2	400 cd/m2	350 cd/m2
Contrast	500:1	N.A.	N.A.	800:1	500:1
Backlight	LED, > 30,000 hours	LED, > 20,000 hours	LED, > 20,000 hours	LED, > 30,000 hours	LED > 20,000 hours
Colours	16 million	65535	65535	16.7 million	262k
Touchscreen	4 wires, resistive	4 wires, resistive	4 wires, resistive	4 wires, resistive	4 wires, resistive
Accuracy	±2%	N.A.	N.A.	±2%	±2%

CONNECTIONS

USB 2.0	1	-	-	1	-
Ethernet 10/100	1	1	1	-	1
Ethernet 10/100/1000	-	-	-	2	-
COM1	RS232	RS232/RS485/RS422 configurable	RS232/RS485/RS422 configurable	RS232	RS232 (isolated)
COM2	RS485	-	-	RS485	RS485 (isolated)
COM3	-	-	-	RS232/RS485	RS485 (isolated)

GENERAL DATA

Flash	256 MB	4 GB	4 GB	128 MB	128 MB
RAM	256 MB	512 MB	512 MB	128 MB	128 MB
Processor	32 bit RISC Cortex A8 600 MHz	ARM Cortex A8 1 Ghz	ARM Cortex A8 1 Ghz	32 bit RISC Cortex A8 600 MHz	32 bits RISC Cortex-A8 600MHz
RTC	Integrated	integrated	integrated	Integrated	Integrated
Power supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	350mA @ 24 Vdc	300 mA at 24 Vdc	300 mA at 24 Vdc	600 mA @24Vdc	650mA @ 24 Vdc
Case	Aluminium	Plastic	Plastic	Plastic	Plastic
Dimension	200.3 x 146.3 x 34 mm	187X147 X29 mm	187X147 X29 mm	200.3 x 146.3 x 34 mm	271 x 213 x 40
Hole dimension	192 x 138 mm			192 x 138 mm	260 x 202 mm
Weight	900 g	600 g	600 g	600 g	1300 g
Operating temperature	-20..50°C	0..50°C	0..50°C	0..50°C	0..50°C
Protection degree	NEMA4 / IP65	Front IP66 REAR IP20	Front IP66 REAR IP20	NEMA4 / IP65	NEMA4 / IP65
Certification	EC	EC UL	EC UL	EC, UL, Atex Zone 2	EC

CONFIGURATION AND PROGRAMMING

Programming tool	EASY BUILDER PRO	-	Web Server	EASY BUILDER PRO	EASY BUILDER PRO
Remote access	-	-	-	EASY ACCESS	

CABLES

CS-DB9F-TIP-V	-	-	-	-	-
CS-DB9M-TIP-V	x	-	-	x	x
CE-RJ45-RJ45-R	x	-	-	x	x

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VISUAL OPERATOR PANELS HMI

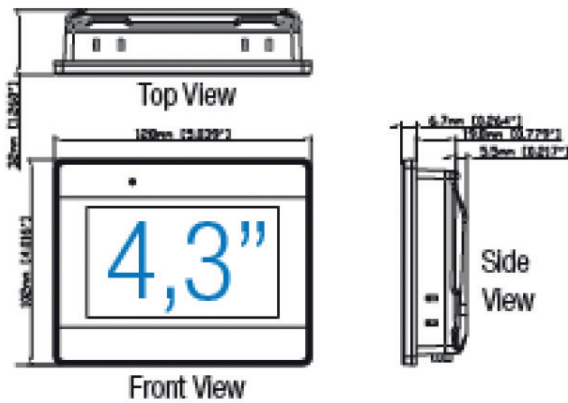
TECHNICAL DATA

	VISUAL8	VISUAL9	VISUAL10	VISUAL11	VISUAL12
					
	Terminal HMI touchscreen 10.1" colour widescreen, Ethernet interface	Terminal HMI touchscreen 10.1" HD, colour widescreen, Ethernet interface	Terminal HMI touchscreen 10.1" HD, colour widescreen, Ethernet interface, WiFi	Terminal HMI touchscreen 9.7" colour widescreen, double Ethernet interface,	Terminal HMI touchscreen 15" colour widescreen, double Ethernet interface, aluminium case
DISPLAY					
Sample	10.1" TFT LCD	10.1" TFT LCD	9.7" TFT LCD	9.7" TFT LCD	15" TFT LCD
Resolution	1024x600	1024x600	1024x768	1024x768	1024x768
Format	16:9	16:9	4:3	4:3	4:3
Brightness	350 cd/m2	350 cd/m2	350 cd/m2	300 cd/m2	4000 cd/m2
Contrast	500:1	500:1	500:1	500:1	700:1
Backlight	LED, > 50,000 hours	LED, > 50,000 hours	LED > 30,000 hours	LED > 30,000 hours	LED, > 50,000 hours
Colours	16.7 million	16.7 million	262k	262k	16.2 million
Touchscreen	4 wires, resistive	4 wires, resistive	4 wires, resistive	4 wires, resistive	4 wires, resistive
Accuracy	±2%	±2%	±2%	±2%	±2%
CONNECTIONS					
USB 2.0	1	1	1	1	2
Ethernet 10/100	1	1 + WiFi IEEE 802.11 b/g/bl	1	-	1
Ethernet 10/100/1000	-	-	-	2	-
COM1	RS232	RS232	RS232	RS232 (isolated)	RS485 (isolated)
COM2	RS485	RS485	RS485	RS485 (isolated)	-
COM3	-	-	-	-	-
GENERAL DATA					
Flash	128 MB	128 MB	512 MB	512 MB	256 MB
RAM	128 MB	128 MB	256 MB	256 MB	256 MB
Processor	32 bits RISC Cortex-A8 600MHz	32 bits RISC Cortex-A8 600MHz	32 bits RISC Cortex A8 1GHz	32 bits RISC Cortex-A8 1GHz	Cortex A8 32Bit RISC 1GHz
RTC	Integrated	Integrated	Integrated	Integrated	Integrated
Power supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	650mA @ 24 Vdc	650mA @ 24 Vdc	500mA @ 24 Vdc	650mA @ 24 Vdc	1000mA @ 24 Vdc
Case	Plastic	Plastic	Plastic	Plastic	Aluminium
Dimension	271 x 213 x 36.4	271 x 213 x 36.4	260.6 x 203.1 x 36.5	260.6 x 203.1 x 36.5	366 x 293 x 57
Hole dimension	260 x 202 mm	260 x 202 mm	250 x 192 mm	250 x 192 mm	352 x 279 mm
Weight	1000 g	1000 g	850 g	850 g	2750 g
Operating temperature	0..50°C	0..50°C	0..50°C	0..50°C	0..50°C
Protection degree	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65
Certification	EC/UL	EC	EC	EC	EC
CONFIGURATION AND PROGRAMMING					
Programming tool	EASY BUILDER PRO	EASY BUILDER PRO	EASY BUILDER PRO	EASY BUILDER PRO	EASY BUILDER PRO
Remote access	-	EASY ACCESS	-	EASY ACCESS	-
CABLES					
CS-DB9F-TIP-V	-	-	-	-	-
CS-DB9M-TIP-V	x	x	x	x	x
CE-RJ45-RJ45-R	x	x	x	x	x

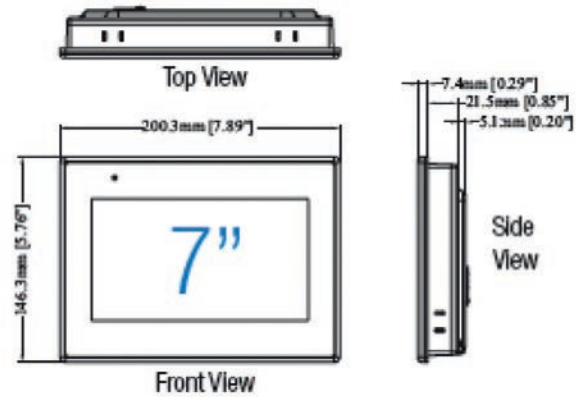
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DIMENSIONS

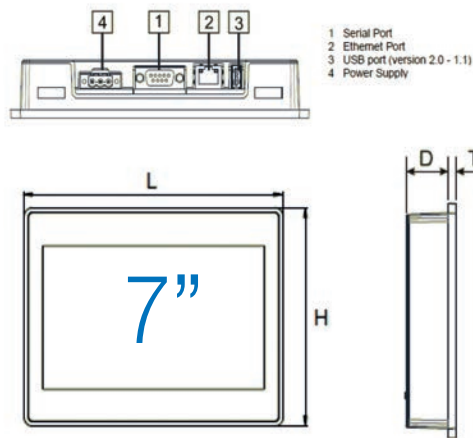
VISUAL1E, VISUAL3



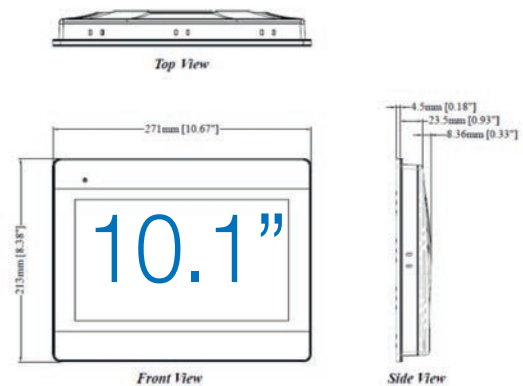
VISUAL2E, VISUAL4, VISUAL4T, VISUAL6



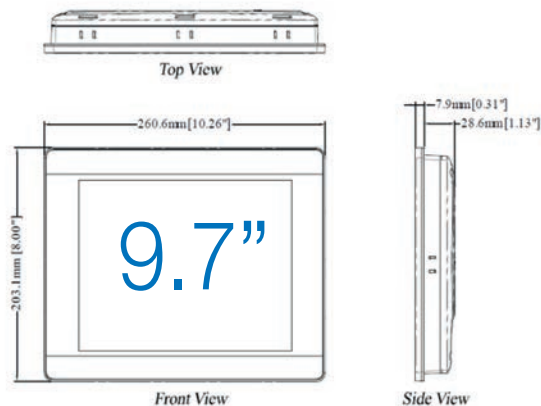
VISUAL5-PC, VISUAL5-WB



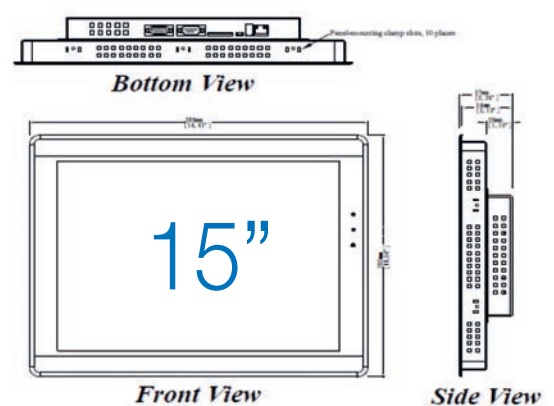
VISUAL7, VISUAL8, VISUAL9



VISUAL10, VISUAL11



VISUAL12



VISUAL OPERATOR PANELS HMI



EASY BUILDER PRO HMI PROGRAMMING ENVIRONMENT

- Integrated windows development environment, toolbars, dialogue windows, menu bars, drag & drop drawing objects
- Multi-purpose objects for dynamic use to support user screens (graphics, buttons, alarm history, etc.)
- Support for multilingual display
- More than 250 drivers are available to ensure easy connection to PLCs, temperature controllers, bar code readers, etc.

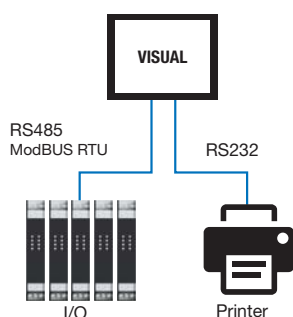


EASY ACCESS REMOTE ASSISTANCE TOOL

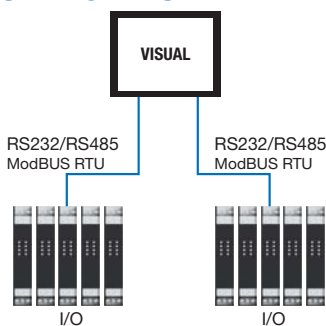
- Remote assistance system activated on HMI VISUAL with Ethernet port
- Remote access to the operator panel and, in passthrough mode, to PLCs and devices connected to it (in serial or Ethernet mode) without any network configuration
- SSL secured VPN connection for the secure exchange of data and information with minimal bandwidth usage

EXAMPLES OF CONNECTION

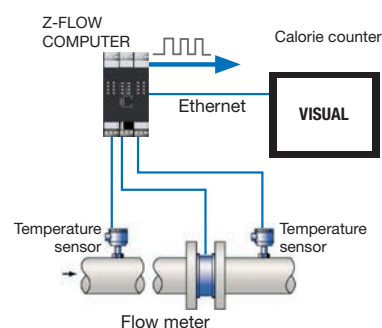
SERIAL



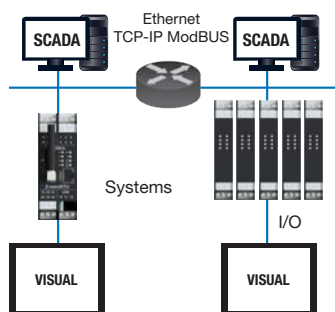
DISTRIBUTED SERIAL NETWORK



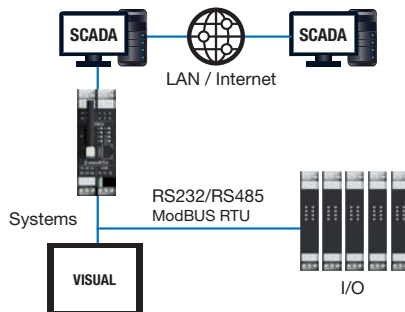
HMI FOR FLOW COMPUTER



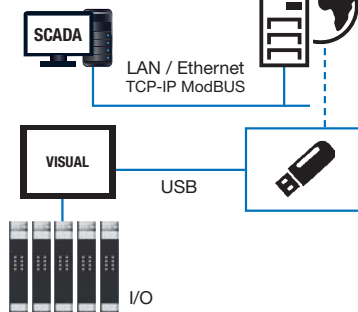
ETHERNET



REMOTE CONTROL



DATA ARCHIVING



ORDER CODE

Code	Description	Code	Description
VISUAL1E	Terminal HMI touchscreen 4.3" colour widescreen, Ethernet interface	VISUAL6	Terminal HMI touchscreen 7" colour widescreen, double Ethernet interface
VISUAL2E	Terminal HMI touchscreen 7" colour widescreen, Ethernet interface	VISUAL7N	Terminal HMI touchscreen 10.1" colour widescreen, Ethernet interface
VISUAL3	Terminal HMI touchscreen 4.3" colour widescreen, Ethernet interface	VISUAL8	Terminal HMI touchscreen 10.1" HD, colour widescreen, Ethernet interface
VISUAL4	Terminal HMI touchscreen 7" colour widescreen, Ethernet interface	VISUAL9	Terminal HMI touchscreen 10.1" HD, colour widescreen, Ethernet interface, WiFi
VISUAL4T	Terminal HMI touchscreen 7" HD, colour widescreen, Ethernet interface, aluminium case	VISUAL10	Terminal HMI touchscreen 9.7" colour widescreen, Ethernet interface
VISUAL5-PC	7" HMI touchscreen Terminal 16:9, 64k colours, TFT LCD, Ethernet interface, version spare part S6001-PC	VISUAL11	Terminal HMI touchscreen 9.7", colour widescreen, double Ethernet interface,
VISUAL5-WB	7" HMI touchscreen Terminal 16:9, 64k colours, TFT LCD, Ethernet interface, version replica HMI / Web Server, CHROMIUM function	VISUAL12	Terminal HMI touchscreen 15" colour widescreen, Ethernet interface, aluminium case

ACCESSORIES and SOFTWARE

CE-RJ45-RJ45-R	Straight Ethernet cable (RJ45 / RJ45)
CS-DB9F-TIP-V	Serial cable RS485 (DB9F / tips)
CS-DB9M-TIP-V	Serial cable RS485 (DB9M / tips)
EB PRO	Programming environment
EASY ACCESS	Remote assistance tool