

1.5



HMI
OPERATOR
PANELS VISUAL

The **VISUAL** touchscreen operator panels are designed to meet every application need, from small automations to complex industrial process control.

With displays 4.3", 7", 9.7", 10.1", 15" and widescreen format, they allow for displaying more information compared to a traditional display while ensuring containment of external dimensions.

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

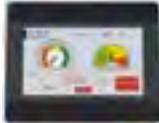
VISUAL terminals are designed to be installed in the harshest environmental conditions thanks to the front panel with IP65/66 protection rating.

The **VISUAL** range is customizable through the EASY BUILDER PRO design

environment equipped with a powerful editor and a simple and intuitive user interface. Through Ethernet, USB, RS232, RS485 communication interfaces, with support for ModBUS RTU / TCP-IP protocols, the terminals can be paired with the most common industrial controllers and other supervision and automation systems.

TECHNICAL DATA

VISUAL1E



HMI 4.3" TFT Display, 1xEth,
256MB Flash

VISUAL2E



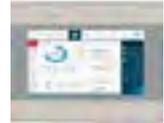
HMI 7" TFT Display, 1xEth,
256MB Flash

VISUAL3



HMI 4.3" TFT Display, 1xEth,
128MB Flash, UL

VISUAL3-FLOW



HMI 4.3" TFT Display, 1xEth,
256MB Flash, UL
(ver. Z-FLOWCOMPUTER)

DISPLAY				
Dimension	4.3" TFT LCD	7" TFT LCD	4.3 " TFT LCD	4.3 " TFT LCD
Resolution	480x272	800x480	480x272	480x272
Format	16:9	16:9	16:9	16:9
Brightness	400 cd/m2	350 cd/m2	500 cd/m2	500 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
Colors	16.7 million	16 million	16 million	16 million
Touchscreen	4-wire, resistive	4-wire, resistive	4-wire, resistive	4-wire, resistive
Accuracy	±2%	±2%	±2%	±2%
Accuracy	±2%	±2%	±2%	±2%
COMMUNICATION				
USB Host 2.0	1	1	1	1
Ethernet 10/100	1	1	1	1
Ethernet 10/100/1000	-	-	-	-
RS232	-	-	-	-
RS485	-	-	-	-
RS232/RS485	1	1	1	1
RS232/RS485/RS422	-	-	-	-
CAN bus Support	-	-	-	-
SD Card Slot	-	-	-	-
Wi-Fi	-	-	-	-
HDMI	-	-	-	-
GENERAL DATA				
Flash Memory	256 MB	256 MB	128 MB	128 MB
RAM	128 MB	128 MB	128 MB	128 MB
Processor	Dual Core RISC	Dual Core RISC	32 bit RISC 600 MHz	32 bit RISC 600 MHz
RTC	Integrated	Integrated	Integrated	Integrated
Power Supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	350 mA @ 24 Vdc	450 mA @ 24 Vdc	450 mA @ 24 Vdc	450 mA @ 24 Vdc
Enclosure	Plastic Housing	Plastic Housing	Plastic Housing	Plastic Housing
Dimensions (WxHxD)	128 x 102 x 32 mm	200.4 x 146.5 x 34 mm	128x102x32 mm	128x102x32 mm
Fanless	119x93 mm	192x138 mm	119x93 mm	119x93 mm
Weight	250 g	520 g	250 g	250 g
Operating temperature	0..55°C	0..55°C	0..45°C	0..45°C
Protection class	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65	NEMA4 / IP65
Design	Yes	Yes	Yes	Yes
Certifications	CE	CE	CE, (UL)	CE, (UL)
CONFIGURATION AND PROGRAMMING				
EASY BUILDER PRO	Yes	Yes	Yes	-
EASY ACCESS	Dashboard	Dashboard	Dashboard	-
Options	-	-	-	-
CODESYS	-	-	-	-
Jmobile	-	-	-	-
WEB SERVER	-	-	-	Yes
HMI Application	-	-	-	Yes



High-resolution TFT display up to 16 million colors, LED-backlit



High-performance RISC, Dual Core, Quad Core processors



Flash memory up to 4GB



RS232/RS485 and Ethernet communication supporting ModBUS RTU and ModBUS TCP-IP protocols



Certifications: CE, UL, Atex Zone 2



Industrial robustness with NEMA4/IP65/IP66 front protection



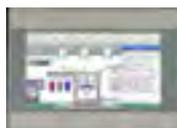
Windows programming tool with advanced editing features



4-wire resistive touchscreen

TECHNICAL DATA

VISUAL4



HMI 7" TFT Display, 1xETH, 128MB Flash, UL, Atex Zone 2, -20..+60°C

VISUAL 4ET



HMI 7" WVA Display, 2xETH, 4GB Flash, UL, -20..+55°C

VISUAL5-PC



HMI 7" TFT Display, 1xETH, 4GB Flash (ver. S6001-PC)

VISUAL5-WB



HMI 7" TFT Display, 1xETH, 4GB Flash

	VISUAL4	VISUAL 4ET	VISUAL5-PC	VISUAL5-WB
DISPLAY				
Dimension	7" TFT LCD	7" TFT LCD	7" TFT Display	7" TFT Display
Resolution	800x480	800x480	800X480	800X480
Format	16:9	16:9	16:9	16:9
Brightness	350 cd/m2	450 cd/m2	200 cd/m2	200 cd/m2
Contrast	800:1	800:1	N.D.	N.D.
Backlight	LED, > 30,000 hours	LED, > 30,000 hours	LED lifespan >20000 hours	LED lifespan >20000 hours
Colors	16.7 million	16.7 million	64k colors	64k colors
Touchscreen	4-wire, resistive	4-wire, resistive	-	-
Accuracy	±2%	±2%	N.D.	N.D.
COMMUNICATION				
USB Host 2.0	1	1	1	1
Ethernet 10/100	1	2	1	1
Ethernet 10/100/1000	-	-	-	-
RS232	1	1	-	-
RS485	1	1	-	-
RS232/RS485	-	-	-	-
RS232/RS485/RS422	-	-	1	1
CAN bus Support	-	-	-	-
SD Card Slot	-	-	-	-
Wi-Fi	-	-	-	-
HDMI	-	-	-	-
GENERAL DATA				
Flash Memory	128 MB	4 GB	4 GB	4 GB
RAM	128 MB	1 GB	512 MB	512 MB
Processor	32 bit RISC 600 MHz	Quad Core RISC	32-bit RISC 1 GHz	32-bit RISC 1 GHz
RTC	Integrated	Integrated	integrated processor	integrated processor
Power Supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	450 mA @ 24 Vdc	350 mA @ 24 Vdc	300 mA @ 24 Vdc	300 mA @ 24 Vdc
Enclosure	Plastic Housing	Aluminum casing	Plastic Housing	Plastic Housing
Dimensions (WxHxD)	200.4 x146.3 x 34 mm	200.3 x 146.3 x 34 mm	187X147 X29 mm	187X147 X29 mm
Fanless	192x138 mm	192 x 138 mm	-	-
Weight	600 g	800 g	600 g	600 g
Operating temperature	-20..+60°C	-20..55°C	0..50°C	0..50°C
Protection class	NEMA4 / IP65	NEMA4 / IP66	Front IP66 REAR IP20	Front IP66 REAR IP20
Design	Yes	Yes	-	-
Certifications	CE, UL, Atex Zone 2 certified	CE, UL	CE, UL, Atex Zone 2 certified	CE, UL, Atex Zone 2 certified
CONFIGURATION AND PROGRAMMING				
EASY BUILDER PRO	Yes	Yes	-	-
EASY ACCESS	Optional configurations available	Optional configurations available	-	-
Options	-	Optional configurations available	-	-
CODESYS	-	Optional configurations available	-	-
Jmobile	-	-	Yes	Yes
WEB SERVER	-	-	Yes	Yes
HMI Application	-	-	Yes	-

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

TECHNICAL DATA

VISUAL 6E



HMI 7" TFT Display, 2xETH, 4GB Flash, UL

VISUAL7N



HMI 10.1" WVA Display, 1xETH, 256MB Flash

VISUAL8E



HMI 10.1" TFT Display, 2xETH, 4GB Flash, UL

VISUAL 9E



HMI 10.1" TFT Display, 2xETH, 128MB Flash

DISPLAY

Dimension	7" TFT LCD	10.1" TFT LCD	10.1" TFT LCD	10.1" TFT Display
Resolution	800x480	800x480	1024x600	1024x600
Format	16:9	16:9	16:9	16:9
Brightness	400 cd/m2	300 cd/m2	350 cd/m2	350 cd/m2
Contrast	800:1	1000:1	500:1	500:1
Backlight	LED > 30,000 hours	LED > 50,000 hours	LED, > 50,000 hours	LED, > 50,000 hours
Colors	16.7 million	16.7 million	16.7 million	16.7 million
Touchscreen	4-wire, resistive	4-wire, resistive	4-wire, resistive	4-wire, resistive
Accuracy	±2%	±2%	±2%	±2%
Accuracy	±2%	±2%	±2%	±2%

COMMUNICATION

USB Host 2.0	1	1	1	1
Ethernet 10/100	2	1	1	1
Ethernet 10/100/1000	-	-	1	1
RS232	1	1	1	1
RS485	1	1	1	1
RS232/RS485	-	-	-	-
RS232/RS485/RS422	-	-	-	-
CAN bus Support	-	-	Yes	Yes
SD Card Slot	-	-	-	-
Wi-Fi	-	-	Optional configurations available	Optional configurations available
HDMI	-	-	-	-

GENERAL DATA

Flash Memory	4 GB	128 MB	4 GB	128 MB
RAM	1 GB	128 MB	1 GB	128 MB
Processor	Quad Core RISC	Dual Core RISC	Quad Core RISC	Quad Core RISC
RTC	Integrated	Integrated	Integrated	Integrated
Power Supply	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Consumption	820 mA @ 24 Vdc	510 mA @ 24 Vdc	1 A @ 24 Vdc	1A@24Vdc
Enclosure	Plastic Housing	Plastic Housing	Plastic Housing	Plastic Housing
Dimensions (WxHxD)	200.3 x 146.3 x 34 mm	271 x 213 x 40 mm	271 x 213 x 36.4 mm	271 x 213 x 36.4 mm
Fanless	192 x 138 mm	260 x 202 mm	260 x 202 mm	260 x 202 mm
Weight	600 g	1000 g	1200 g	1200 g
Operating temperature	0..55°C	0..55°C	0..50°C	0..50°C
Protection class	NEMA4 / IP66	NEMA4 / IP65	NEMA4 / IP65	UL Type4X / NEMA4 / IP66
Design	Yes	Yes	Yes	Yes
Certifications	CE, UL	CE	CE, UL	CE, UL

CONFIGURATION AND PROGRAMMING

EASY BUILDER PRO	Yes	Yes	Yes	Yes
EASY ACCESS	Yes	Optional configurations available	Optional configurations available	Optional configurations available
Options	Yes	-	Optional configurations available	Optional configurations available
CODESYS	Yes	-	Optional configurations available	Optional configurations available
Jmobile	-	-	-	-
WEB SERVER	-	-	-	-
HMI Application	-	-	-	-

TECHNICAL DATA

VISUAL 11E



HMI 9.7" XGA TFT Display, 2xETH, 4GB Flash, UL

VISUAL 12E



HMI 15" WVA Display, 2xETH, 4GB Flash, UL

VISUALTV



HMI with external touchscreen, 2xETH, 4GB Flash, UL

DISPLAY			
Dimension	9.7" TFT Display	15" WVA Display	-
Resolution	1024x768	1024x768	Support up to 1920 x 1080 resolution
Format	4:3	4:3	Support for 16:9 or 4:3 aspect ratio
Brightness	350 cd/m2	350 cd/m2	-
Contrast	900:1	2500:1	-
Backlight	LED > 30,000 hours	LED > 70,000 hours	-
Colors	64k colors	16.2 million	-
Touchscreen	4-wire, resistive	4-wire, resistive	-
Accuracy	±2%	±2%	-
COMMUNICATION			
USB Host 2.0	1	1	1
Ethernet 10/100	1	1	1
Ethernet 10/100/1000	1	1	1
RS232	1	1	-
RS485	1	1	-
RS232/RS485	-	-	1
RS232/RS485/RS422	-	-	-
CAN bus Support	Yes	-	-
SD Card Slot	-	SD/DSDHC	-
Wi-Fi	Optional configurations available	-	-
HDMI	-	-	Yes
GENERAL DATA			
Flash Memory	4 GB	4 GB	4 GB
RAM	1 GB	1 GB	1 GB
Processor	Quad Core RISC	Quad Core RISC	Quad Core RISC
RTC	Integrated	Integrated	Integrated
Power Supply	24 Vdc	24 Vdc	24 Vdc
Consumption	1A@24Vdc	1.3A@24Vdc	850mA@24VDC
Enclosure	Plastic Housing	Aluminum casing	Plastic Housing
Dimensions (WxHxD)	260.6 x 203.1 x 36.5 mm	366 x 293 x 57 mm	29.8 x 130 x 115 mm
Fanless	250 x 192 mm	352 x 279 mm	-
Weight	1000 g	2740 g	240 g
Operating temperature	0..50°C	0..50°C	0..50°C
Protection class	UL Type4X / NEMA4 / IP66	UL Type4X / NEMA4 / IP66	IP20
Design	Yes	Yes	-
Certifications	CE, UL	CE, UL	CE, UL
CONFIGURATION AND PROGRAMMING			
EASY BUILDER PRO	Yes	Yes	Yes
EASY ACCESS	Optional configurations available	Optional configurations available	Optional configurations available
Options	Optional configurations available	Optional configurations available	Optional configurations available
CODESYS	Optional configurations available	Optional configurations available	Optional configurations available
Jmobile	-	-	-
WEB SERVER	-	-	-
HMI Application	-	-	-



EASY BUILDER PRO

HMI PROGRAMMING ENVIRONMENT

- Integrated Windows development environment, toolbars, dialog boxes, menus, drag & drop drawing objects
- Multifunctional objects for dynamic use supporting user screens (charts, buttons, alarm history, etc.)
- Multilingual display support
- Over 250 drivers available to ensure easy connection to PLCs, temperature controllers, barcode readers, etc.



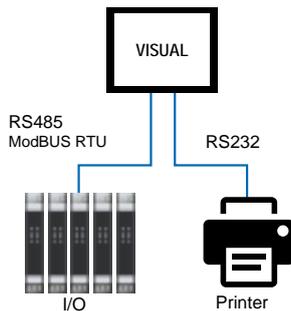
VISUAL EA

REMOTE ASSISTANCE TOOL

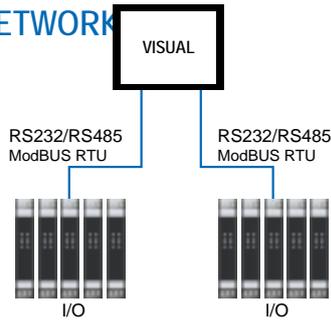
- Remote assistance system activated on HMI VISUAL equipped with Ethernet port
- Remote access to the operator panel and, in passthrough mode, to PLCs and devices connected to it (in serial or Ethernet mode) **without any network configuration**
- SSL-protected VPN connection for secure data and information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

EXAMPLES OF CONNECTIONS

SERIAL

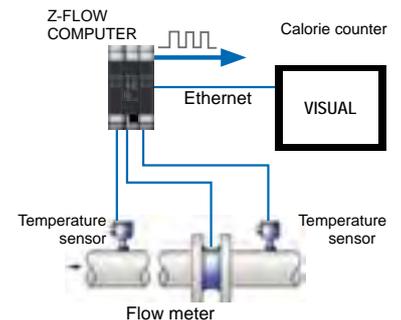


DISTRIBUTED NETWORK

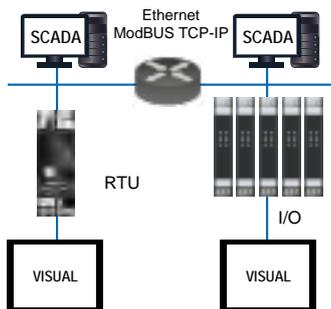


SERIAL

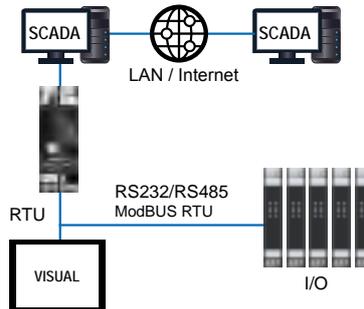
HMI FOR FLOW COMPUTER



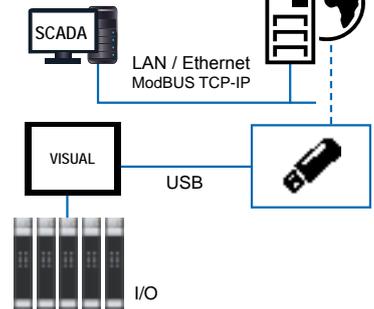
ETHERNET



REMOTE CONTROL



DATA STORAGE



ORDER CODES

Code	Description	Code	Description
VISUAL11E	HMI 9.7" XGA TFT Display, 2xETH, 4GB Flash, UL	VISUAL5-PC	HMI 7" TFT Display, 1xETH, 4GB Flash (ver. S6001-PC)
VISUAL12E	HMI 15" WVA Display, 2xETH, 4GB Flash, UL	VISUAL5-WB	HMI 7" TFT Display, 1xETH, 4GB Flash
VISUAL1E	HMI 4.3" TFT Display, 1xETH, 256MB Flash	VISUAL6E	HMI 7" TFT Display, 2xETH, 4GB Flash, UL
VISUAL2E	HMI 7" TFT Display, 1xETH, 256MB Flash	VISUAL7N	HMI 10.1" WVA Display, 1xETH, 256MB Flash
VISUAL3	HMI 4.3" TFT Display, 1xETH, 128MB Flash, UL	VISUAL8E	HMI 10.1" TFT Display, 2xETH, 4GB Flash, UL
VISUAL3-FLOW	HMI 4.3" TFT Display, 1xETH, 256MB Flash, UL (ver. Z-FLOWCOMPUTER)	VISUAL9E	HMI 10.1" TFT Display, 2xETH, 128MB Flash
VISUAL4	HMI 7" TFT Display, 1xETH, 128MB Flash, UL, Atex Zone 2, -20...+60°C	VISUALTV	HMI with external touchscreen, 2xETH, 4GB Flash, UL
VISUAL4ET	HMI 7" WVA Display, 2xETH, 4GB Flash, UL, -20...+55°C	VISUALWIFI	Wi-Fi expansion module Series VISUAL

ACCESSORIES AND SOFTWARE

CE-RJ45-RJ45-R	Straight Ethernet cable (RJ45 / RJ45)
CS-DB9F-TIP-V	Serial RS485 cable (DB9F / tips)
CS-DB9M-TIP-V	Serial RS485 cable (DB9M / tips)
EB PRO	Programming environment
VISUAL EA	Remote Assistance Tool