FTX
Fotron
Sun powered monitor

FOTRON is an outdoor color monitor with FHD resolution (1920x1080 pixels) that utilizes special LCD technology that uses solar radiation to increase the visibility of the display, thus obtaining excellent readability in conditions of intense sunlight, with a very low energy requirement, equal to 5% of the consumption of common high brightness LCD's. For this reason, FOTRON, thanks to an efficient solar panel equipped with a buffer battery, can also be installed in urban areas where an simple electrical connection is not available, making digital communication unlimited.

FOTRON is designed to work in any place, it is built with a sturdy anti-vandal structure in aluminum with a degree of protection against atmospheric agents equal to IP65. The efficient passive heat dissipation system, in addition to not requiring any maintenance, allows you to install FOTRON in environments with an extended temperature range between -20 ° C and + 50 ° C which represents a big step forward compared to traditional outdoor LCD's and above all to E-paper displays with a limit between 0 ° C and + 50 ° C.
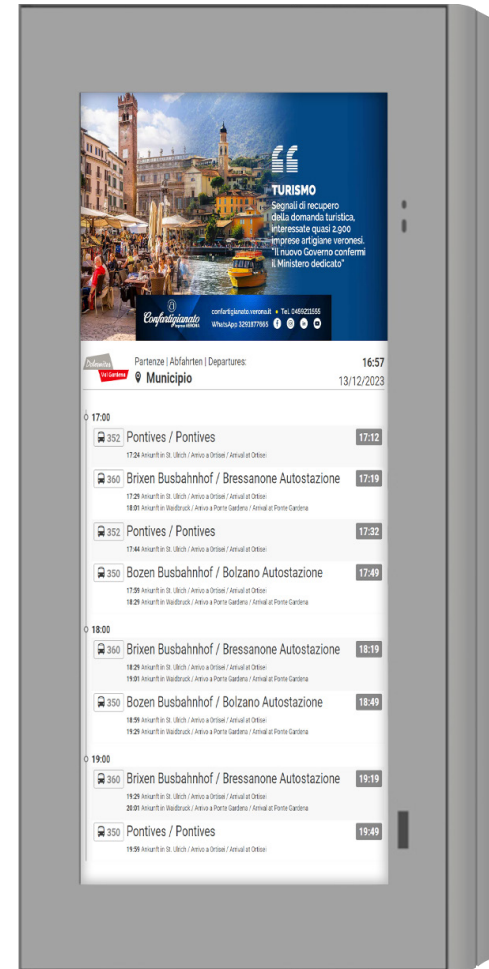
- **Sunlight readble**
- **High brightness up to 2.000 nit**
- **Ultra low power**
- **Solar powered**
- **Zero maintenance**
- **Advanced diagnostic system**

ENVIRONMENT
Outdoor
IP65 water/dust proof
IK10 vandal proof
Temperature range from -20°C to +50°C

STRUCTURE
Main structure in anti-corrosive aluminium
Antireflective safety 4+3 tempered glass
Safety Lock and invisible screws and hinges
Wide range of accessories for wall and pole mounting

CE RoHS2 2011/65/EU

Technical Specification

	FTX.P32	FTX.L32

General

Screen orientation	Portrait	Landscape
Screen size (inch)	32"	
Screen active area (cm)	39,2 x 69,8	
Display brightness (nit)	up to 2000 (*)	
Screen resolution (pixel)	Full HD - 1920x1080	
Contrast ratio (typ)	variable (*)	
Viewing angle (H/V)	178° / 178°	
Backlight Life Cycle	100.000 hours (*)	
System operation	24/7/365	
Screen side	Single	

Environment

Environment protection	Outdoor IP65 (Nema 3S)
Sun exposure	suggested for enhance the visibility
Operating temperature	-20°C / +50°C
Environment humidity	10% - 90%
Antivandal protection	IK10

Enclosure

Air cooling system	passive dissipation
Enclosure material	Aluminium
Glass	Laminated glass (4mm + 3mm)
Glass reflection	Antireflective
Standard enclosure color	Light Gray (RAL 9006)
Standard glass color	Black (RAL 9004)

Power

Vac supply	230V AC +/- 10 12V DC
Power consumption (typ)	24 W (daytime) (**) 18 W (nighttime) (**)

Dimensions

Height (cm)	85,5	55
Width (cm)	55	85,5
Depth (cm)	8,5	
Weight (Kg)	22	

Notes (*) depending on sunshine conditions   (**) with max of 40° environment temperature

Compared to Epaper technology

E-paper	Fotron
Reflecting technology (without Backlight)	Reflecting technology (with integrated dynamic backlight)
Static images (slow data update).	Dynamic images with FHD resolution.
Not suitable for transmitting advertising content	Suitable for transmitting advertising and commercial content.
Suitable for handling small amounts of data (150 bytes)	Supports large amounts of data (based on power consumption)
Complex data input and page construction not supported by common digital signage or PID' software	Standard HDMI input, images and videos in standard formats
Interactivity through additional buttons	Interactivity with touch screen or additional buttons
Limited software libraries, few fonts available	Wide choice of software libraries and fonts
Typically, grayscale images and text	Images and videos at 16.7 mil. of color
Outdoor, but does not support harsh climates, range between 0 ° C and + 50 ° C	Outdoor, with a range between -20 ° C and + 50 ° C
Readable in sunlight, in the dark with additional light	Readable in sunlight, in the dark with integrated dynamic backlight

Photovoltaic system

Cell Type	MONO
Dimension Panel (mm)	1485 x 668 x 30
Weight	11Kg
Power (Pmax)	180W
Maximum Power Voltage (Vmp)	19,47
Maximum Power Current (Imp)	9,25
Open circuit voltage (Voc)	23,85
Short circuit current (Isc)	9,74
Battery:	12V 80 AH
Battery life:	up to 50 hours without solar charge