



The TFT 46" offers versatile applications in form of Display and E-Kiosk. They are available in both portrait and landscape format. Within the Funkwerk hardware portfolio, various mounting options and decorative trims are also available as design element for the TFT 46" Display and E-Kiosk.

#### MAXIMUM FLEXIBILITY

The TFT 46" Display and E-Kiosk offer high flexibility, maximum safety and energy efficiency. All devices are equipped with different sensors for control the brightness, vandalism detection to avoid and protect against damage and destruction. Optional they have a Stand-by-Function that automatically switches the displays to energy saving mode when inactive. Furthermore, an optional Text-to-Speech (TTS) function is available.

The TFT 46" Display and E-Kiosk are developed for indoor and outdoor use.

#### HIGHLIGHTS

- » one-sided / double-sided for indoor and outdoor
- » modular structure easy maintenance and good spare part availability
- » integrated sensor technology for monitoring temperature, humidity, brightness and error detection
- » integrated, high-performance heat exchanger
- » anti-reflective laminated safety glass with highly effective IR and UV blocking filter
- » performance control unit for high resolution applications or videos
- » CE Certificate, TSI conformity

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# TECHNICAL DATA

GENERAL DESCRIPTION	
Exact designation	TFT 46" Display single-sided – Landscape / Portrait
	TFT 46" Display double-sided – Landscape / Portrait
	TFT 46" E-Kiosk single-sided – Landscape / Portrait
	TFT 46" E-Kiosk double-sided – Landscape / Portrait
Area of application	outdoor and indoor, also with direct sunlight

### TFT-PANEL

Display area	Screen size (H x W):	approx. 572 x 1.018 mm
	Screen diagonal:	46"
	Aspect ratio:	16:9 [Landscape] / 9:16 [Portrait]
	Resolution:	Full-HD with 1.920 x 1.080 pixels
Display colour	up to 16.7 million possible colours	
Viewing angle	typical 170° in horizontal and vertical	direction
Initial brightness value	max. 2.500 cd/m <sup>2</sup>	
Initial contrast	typical 4.000:1	
Ambient light	readable even in direct sunlight	
Backlighting	LED backlighting, brightness control a	according to ambient light



### HOUSING

Front glass	anti-reflective laminated safety glass with thickness of approx. 8.8 mm, with highly effective IR and UV blocking filter
Housing material	galvanized steel / Aluminium
Surface	Base colour: Deep black RAL9011
Fastening	TFT 46" Display single-sided & double-sided: 4 x M12 threaded bolds
	TFT 46" E-Kiosk single-sided & double -sided: above column base, 6 mounting holes for M16 threaded rods on the ground

DIMENSIONS / WEIGHT		
Dimension (W x H x D)	TFT 46" Display single-sided Portrait	733 x 1.178 x 252,5 mm
	TFT 46" Display single-sided Landscape	1.178 x 733 x 252,5 mm
	TFT 46" Display double-sided Portrait	733 x 1.178 x 252,5 mm
	TFT 46" Display double-sided Landscape	1.178 x 733 x 252,5 mm
	TFT 46" E-Kiosk single-sided Portrait	733 x 2.268 x 300 mm
	TFT 46" E-Kiosk single-sided Landscape	1.178 x 1.813 x 300 mm
	TFT 46" E-Kiosk double-sided Portrait	733 x 2.268 x 300 mm
	TFT 46" E-Kiosk double-sided Landscape	1.178 x 1.813 x 300 mm
Weight (without trim strip)	TFT 46" Display single-sided Portrait	ca. 80 kg
	TFT 46" Display single-sided Landscape	ca. 80 kg
	TFT 46" Display double-sided Portrait	ca. 90 kg
	TFT 46" Display double-sided Landscape	ca. 90 kg
	TFT 46" E-Kiosk single-sided Portrait	ca. 168 kg
	TFT 46" E-Kiosk single-sided Landscape	ca. 168 kg
	TFT 46" E-Kiosk double-sided Portrait	ca. 183 kg
	TFT 46" E-Kiosk double-sided Landscape	ca. 183 kg

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#### POWER SUPPLY

Power supply	230 V / 50 Hz, fused by FI/LS switch with 30 mA / 6 A,	
	tripping characteristic C	
	TFT 46" Display single-sided	P = 400 W
	TFT 46" Display double-sided	P = 780 W
	TFT 46" E-Kiosk single-sided	P = 480 W
	TFT 46" E-Kiosk double-sided	P = 780 W
Typical Power consumption Operation	TFT 46" Display single-sided	100 W / max. 200 W plus 200 W heating
	TFT 46" Display double-sided	200 W / max. 380 W plus 400 W heating
	TFT 46" E-Kiosk single-sided	100 W / max. 200 W plus 200 W heating
	TFT 46" E-Kiosk double-sided	200 W / max. 380 W plus 400 W heating

# CLIMATIC & ENVIRONMENTAL CONDITIONS

Temperature range operation	-20° C to +40° C
Temperature range storage	-20° C to +50° C
Air conditioning	powerful heat exchanger for cooling the interior 200 W heating foil for heating the interior
Service life of the entire device	approx. 10 years, reduction of display luminosity after 50.000 h to 50 % (at T = 25° $\pm$ 2° C)
Protection class / electrical protection class	Monitor Part IP65 / Protection Class 2
Approvals	CE (EMC and electrical safety)

CONTROL UNIT & INTERFACES	
Control Unit	Kontron D3723-R mITX with AMD Ryzen Embedded R2314, max. 4 x 3,5 GHz, integrated on-Board Vega GPU
Standard Interfaces	DisplayPort, USB, Gigabit Ethernet / LAN / RJ45, etc.



## INPUT / OUTPUT COMPONENTS

Release button (Only for the E-Kiosk variants)	Push button with raised letter "i" as information for persons with impaired vision. Touch surface 25 cm <sup>2</sup> . Optical actuation feedback. TSI PRM conformity
Acoustic output	waterproof loudspeaker (IP65). Output power max. 18 W. Volume configurable
Read aloud function (Only for the E-Kiosk variants)	Connection to TTS-Engine Server with streaming through MRCP for playback without time delay, license and voice package is not included. Optional license language package German / English / French. Other languages on request

SENSORS & MONITORING	
Sensors / monitoring functions	temperature & humidity, glass breakage, ambient light, backlight error and fan speed
Funkwerk Sensor Module (optional)	Funkwerk Sensor Module for Stand By Controller of the displays, control of display brightness and train phase detection
Display control function and network access	with Funkwerk control unit displays can be controlled by integrated browser Service WEB interface, accessible via web browser, SSH, SCP, VNC, SNMP v1 / v2 / v3
Brightness control & Fallback display	Brightness control according to ambient light. Display of a definable fallback page in case of interruption of the data connection