

## Smart Touch Displays 2.0" - 4.3"

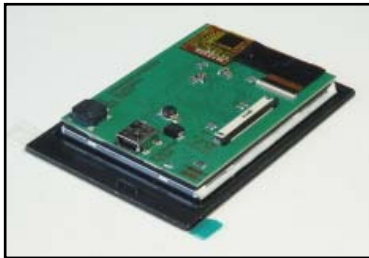
- PCAP Touchpanel, optically bonded
- Brilliant IPS Display
- 1000cd (typ.)
- 2.0" - 2.8" - 3.5" - 4.3"
- USB + SPI + I<sup>2</sup>C-Bus + RS-232
- More than 350 Graphic Functions
- Programmable
- f.o.c. Windows Tool (WYSIWYG)
- Simulator and Debugger



# Brilliant Touchpanel With Control Functions and USB



These new and affordable displays are ideal for all compact applications, be it just as a simple switch or controller. Thanks to the brilliant display, they make an excellent figure in any device. They can run immediately and are delivered with integrated functions already.



## USB and more Interfaces

Littered with many interfaces there's a wide variety of possible uses. From simple digital outputs (8x, expandable) for switching applications, via analog inputs for measuring and displaying parameters or serial interfaces such as USB and RS-232 / RS-485 for connection to classic PC systems. For communication with  $\mu$ C the standard interfaces SPI and I<sup>2</sup>C-bus are available. 4 analog inputs and a PWM enable this touch panel to become an intelligent control unit with calculation and management of data and signals.

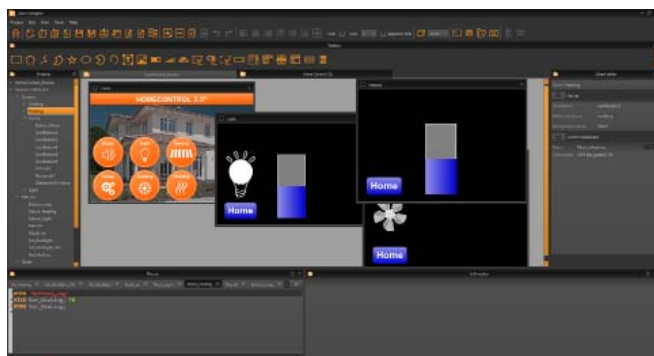
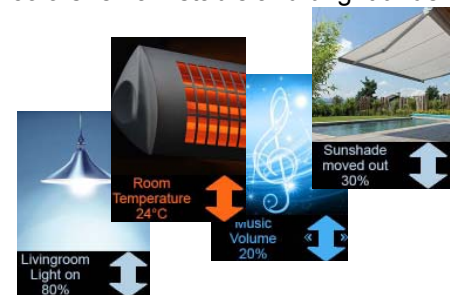
## Extremely Bright Display for Clear Images

Thanks to IPS and special AACS technology, brightness of more than 1000 cd/m<sup>2</sup> are achieved. So these touch panels offer a brilliant and high-contrast display even in bright daylight. The viewing angle for this screen technology is almost 340° thus it can be used in landscape and portrait mode without any change. The colors remain stable and bright under all viewing directions.

## PCAP Touchpanel

A high-quality surface made of scratch-resistant glass enables direct and intuitive interactions. Available are currently the formats 2.0", 2.8", 3.5" and 4.3".

The miniature touch panels are therefore ideal as a replacement for physical switches and controllers in home automation. Other applications are control panel in mobile home or for installation in kitchen, wellness or fitness equipment.



## The Windows Tool

All touch and display functions can be freely designed using the Windows tool „uniTFTDesigner“.

Individual pages can be set up using the graphical WYSIWYG editor: here a background picture, there a logo and text, further a measured value, a slider, etc.

The tool also includes a simulator which makes the result immediately visible; including functionality by touch and the inputs and outputs. Even a debugger is included to go step by step through all macros that may be programmed.



## Assembly

The installation is done by simply gluing in the front. The adhesive glue is already supplied and enables waterproof installation (IP54). The glass front is only 1.5mm thick and can be recessed elegantly. All I/Os can be reached via a 40-pin ZIF connector, the power supply is 3.3V or alternatively provided via the miniUSB connector.

Characteristics						
Value	Condition	uniTFTs020	uniTFTs028	uniTFTs035	uniTFTs043	Unit
Size		2.0"	2.8"	3.5"	4.3"	inch
Resolution		320x240x3	320x240x3	480x320x3	480x272x3	dots
Outline dim.		65x43	84x58	100x65	114x84	mm
Temp. Range		-20..+70				°C
Op. Voltage		3.3				V
Interface		USB, RS-232, SPI, I <sup>2</sup> C				
Touchpanel		with PCAP, optically bonded				
Brightness	Backlight 100%	850	750	480	850	cd/m <sup>2</sup>
	Backlight 150%	1200	1100	700	1200	cd/m <sup>2</sup>

## High-End Control Units up to 10.1"

The uniTFT series include further sizes up to 10.1" with an extended functionality. All displays were developed in Germany. The support includes a direct contact person from the development, including assistance in programming. Availability of these displays is guaranteed until at least 2028. Best conditions for use in industrial and medical technology.

