



EM3.5L – 3.5” TFT LCD MODULE

Description

EM3.5L is a-Si TFT LCD module with QVGA resolution and landscape orientation. It can display 16.7M colours supporting parallel RGB video interface and SPI. It is driven by LCD driver without internal DDRAM. An integrated gamma control circuit is included that can be adjusted by software commands to provide maximum flexibility and optimal display quality.

The module also provide an image reversion function for reverting images up/down and left/right

EM3.5L embeds a PWM function to generate power for back-light control.

This LCD module is the ideal solution for medium sized applications such as wired telephones, POS, video door-phones, digital cameras, industrial terminals and instruments.

Optional Components:

- The module can be supplied with a 4-wire analog resistive TP (Touch Panel).
- The module with TP can be supplied with an embedded low power TP controller IC that can be driven via 3-wire SPI.

Key Specifications

Parameter	Characteristics
Display technology	a-Si TFT
Display type	Transmissive
Mode	Positive (normally white)
Viewing direction	6 o'clock
LCD Driver	HX8238-A
Resolution	320RGBx240 Dots
Colour	16.7M
Module structure	LCD panel + back-light + resistive touch panel + Interface FPC
Module dimensions (mm)	77.8(L) x 64.5(W) x 4.15(T)
Active Area (mm)	70.6(L) x 53.06(W)
LCD Driver Interface	- 24-bits Parallel RGB interface - Serial Peripheral Interface (SPI) for registers settings
LCD Driver power supply	2.5 V to 3.6 V
TP Controller power supply	2.2V to 5.25V
TP Controller interface	QSPI/SPI 3-wire interface
Back-light circuit	6 LED in series
Module current consumption (with back-light off)	4mA typ.
Back-light forward current	20mA Typ. at 19.2V
Operating temperature range	-20°C to +70°C
Storage temperature range	-30°C to +80°C

Ordering Information

EM3.5L – TP – TPC

Where:

TP is touch panel selection digit. TP = 1 for the module with touch panel. TP = 0 for the module without touch panel

TPC is touch panel controller selection digit. TPC = 1 for the module with TP controller. TPC = 0 for the module without TP controller.

Please contact EM for detailed schematics and specification.

