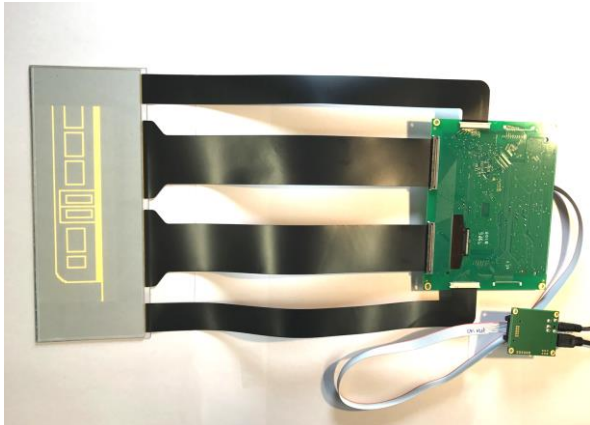# TIP ELT160.60.100 KIT

TASEL® Introduction Package for the ELT160.60.100 Transparent Matrix Display

ELT160.60.100 TIP kit running an animated subway demo with Demo Kit board (smaller board) attached. Shielding arrangement not shown.

The TASEL Introduction Package (TIP) kit for ELT160.60.100 offers a fast and easy way to experiment with a transparent matrix display.

The kit consists of

- one encapsulated ELT160.60.100 display on a 1.1mm substrate and with 1.1mm cover glass.
- Driving electronics board (ECA) with four connectors to FPCs of the display. ECA size is approx. 149mm x 115mm.
- ELT160.60.100 Demo Kit for driving the display through USB/PC.
- Documentation on the interface, mechanical and optical characteristics and handling instructions

The TIP kit enables experimenting different transparent matrix display concepts, e.g. try out location, content and visibility of the display.

TASEL Introduction Package for ELT160.60.100 Display

Product highlights:

- Enables quick prototyping of transparent matrix display concepts
- Easy-to-read display for completely arbitrary graphical output, e.g. for displaying symbolic character sets
- Comes with necessary electrical parts, cabling, shielding arrangement for the electronics, PC connectivity and documents

Ordering Information:

Product	Part #	Features
TIP kit ELT160.60.100	EL000 53700	The complete TIP kit for ELT160.60.100
ELT160.60.100 Demo Kit*	EL000 63100	for USB/PC connectivity

Display Technical specifications:

Technology	Inorganic Thin Film Electroluminescence
Color	TFEL-yellow
Pixels	160 columns and 60 rows of square pixels.
Pixel Pitch/Size	pitch 1mm x 1mm, size 0,8mm x 0,8mm
Viewing angle	2x 179°, (two sides - substrate is transparent)
Response time	< 1 ms
Luminance	up to 100 cd/m^2, depending on content
Contrast	ambient (background lighting) dependent; daylight readable in shadow areas
Transparency when laminated	≥ 70% when laminated properly/with cover glass; depends on the surrounding glazing
Glass panel size	91mm (± 1mm) x 225mm (± 1mm)
Thickness	2,2mm
Power consumption	Typical, 20W, abs. max 36W
Temperature	-60 °C to +85 °C
Warranty	3 months

LIP ELT160.60.100 KIT

Lamination Introduction Package for the ELT160.60.100 Transparent Matrix Display

ELT160.60.100 display when laminated

NOTE: The .100LIP kit display comes with a sandwich shielding arrangement for the electronics which leaves sides of the arrangement open. Electronics are capable of generating voltages in the excess of 200V. Handle with care, and do not touch any part of the display or electronics during operation.

The Lamination Introduction Package (LIP) kit for ELT160.60.100-07NC is the easiest way to experiment the in-glass lamination of a bit larger matrix display (224mm x 90mm). The package is a bundle of mechanical samples without flex cabling, with flex cabling and, finally, a functional display. The product features:

- Four mechanical samples of ELT160.60.100 glass without flexes bonded
- Two mechanical samples of ELT160.60.100 glass with flexes bonded (but emission of light not possible)
- One functional ELT160.60.100 display
- Driving electronics board (ECA) with four connectors to FPCs of the functional display. ECA size approx. 149mm x 115mm.
- ELT160.60.100 Demo Kit for driving the display through USB/PC.
- Documentation on the interface, mechanical and optical characteristics and handling instructions
- Sandwich shielding arrangement for the electronics

User of the kit is first encouraged to try lamination of mechanical samples without flexes, then with flex cabling, and finally with the functional display. Electronics can be disconnected from the display during lamination. Thickness of the glass is 0.7mm.

Lamination Introduction Package for ELT160.60.100 Display

Product highlights:

- Enables optimized ramp-up of lamination process of a larger matrix display
- Sample withstand standard lamination processes
- Easy-to-read display for completely arbitrary graphical output, e.g. for displaying symbolic character sets
- Comes with necessary electrical parts, cabling, PC connectivity and documents
- Parts of the LIP package also available separately for repeated experiments

Ordering Information:

Product	Part #	Features
LIP kit ELT160.60.100-07NC	EL000 65500	The complete LIP kit for ELT160.60.100
ELT160.60.100-07NC display*	EL000 45100	Glass, FPCs and driving electronics
4x ELT160.60.100-07NC-MECH-SAMPLE*	EL000 65700	Glass substrate without flexes
2x ELT160.60.100-07NC-MECH-SAMPLE -250 FPC*	EL000 65600	Glass substrate with flexes
ELT160.60.100-07NC Demo kit*	EL000 63100	Provides USB/PC connectivity

Display Technical specifications:

Technology	Inorganic Thin Film Electroluminescence
Color	TFEL-yellow
Pixels	160 columns and 60 rows of square pixels.
Pixel Pitch/Size	pitch 1mm x 1mm, size 0,8mm x 0,8mm
Viewing angle	2x 179°, (two sides - substrate is transparent)
Response time	< 1 ms
Luminance	up to 100 cd/m², depending on content
Contrast	ambient (background lighting) dependent; daylight readable in shadow areas
Transparency when laminated	≥ 70% when laminated properly/with cover glass; depends on the surrounding glazing
Glass panel size	90mm (height) x 224mm (width), thickness 0,7mm
Power consumption	Typical, 20W, abs. max 36W
Temperature	-60 °C to +85 °C
Warranty	3 months; not covering lamination process or laminated product