#### **Technical capability summary**

### **Membrane switch keypad**



The membrane switch keypad is a thin man-machine interface.

It is assembled with a succession of film layers which gives it great robustness. It can be used in constraining environments with dust or high level of humidity. Integrated LEDs and keys are used to transmit information between the user and the machine.

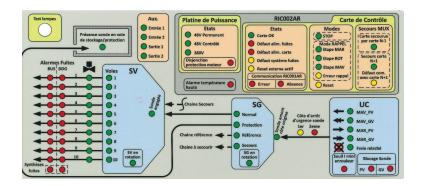
A screen or touch screen can also be integrated through a window or an opening on it.

Basic Information	Standard	Standard	
GENERAL			
Maximum dimensions:	450mm x 300mm	450mm x 600mm	
Minimum thickness:	0.7mm	Same	
Maximum protection IP:	IP65	Same	
FRONT PANEL			
Type of printing	Digital printing (CMJN) Screen-printing	Same	
Type of finishing:	Structured Polished	Same	
Type of varnish:	Translucent Infrared Clear Textured	Same	
Color range:	Pantone / RAL	Same	
Number of colors:	Illimited	Same	
Material type and thickness:	PET [75µm-375µm] PEN [75µm-375µm] Polycarbonate [125µm – 500µm] PMMA [0.8mm – 5mm] PU [300µm -600µm]	Same	
Optional coating characteristics:	Anti-scratch Anti-microbial Anti-glare UV-resistant	Same	

ELECTRICAL CIRCUIT				
Track width:	[1mm – 2.54mm]	0.5mm mini		
Circuit structure:	Single layer Double layer Triple layer Hole via	Same		
Connection:	Crimping 36 points max at 2.54mm pitch (male or female) ZIF	Cables		
Protection layer:	Varnish PET protective film [50 à 75 µm]	Same		
Inks:	Silver ink Carbon ink Dielectric	Same		
Material:	PET PEN	Kapton		
ELECTROLUMINESCENT INKS				
Colors available:	White Blue	Same		
Power supply:	150V – 400Hz	Same		
LED:				
Color range:	Top or side	Same		
Number of colors:	Model 1206 3.2 x 1.5 x 0.35mm	Model 0805 2.0 x 1.25 x 0.80mm		
Material type and thickness:	Model LTST 020 3.8 x 1.2 x 0.6mm	Same		
Optional coating characteristics:	Simple Double RGB	Same		
KEY:				
Type of key:	Metal cup Ink contact	Same		
Type embossing:	Domed surface Raised flat surface Raised key contour	Same		
Maximum embossing height:	3x material thickness	Same		
Cup dimensions:	[6mm-16mm]	30mm maximum		
Cup surface density:	[170g – 400g]	Same		
Backlight:	Yes in the center of the metal cup	Same		
ADHESIVE:				
Type of adhesive:	Acrylic Acrylic + Silicone Low surface tension	Same		
Thickness:	[50µm - 350µm] 3M	Same		
Colors:	Transparent Opaque (grey/white) Opaque (black)	Same		

### **Technical capability summary**

## Overlay



An overlay or front panel covers is a simple way to make a surface decorative or/and functional.

Simple to apply with an integrated adhesive, it is wear resistance.

It can be embossed to permit the use of button and be all shape and all dimensions.

Basic Information	Standard	Standard	
GENERAL			
Maximum dimensions:	400mm x 350mm	650mm x 500mm	
Minimum thickness:	0.125mm	Same	
Type of printing:	Digital printing (CMJN) Screen-printing	Same	
Type of finishing:	Structured Polished	Same	
Type of varnish:	Translucent Infrared Clear Textured	Same	
Color range:	Pantone / RAL	Same	
Number of colors:	Illimited	Same	
Material type and thickness:	PET [75µm-375µm] PEN [75µm-375µm] PMMA [0.8mm – 5mm] PU [300µm -600µm]	Same	
Optional coating characteristics:	Anti-scratch Anti-microbial Anti-glare UV-resistant	Same	
KEY			
Type embossing	Domed surface Raised flat surface Raised key contour	Same	
Maximum embossing height:	3x material thickness Same		
ADHESIVE			
Type of adhesive	Acrylic Acrylic + Silicone Low surface tension	Same	
Thickness:	[50µm - 350µm] 3M	Same	

### **Technical capability summary**

### **Technical label**



Technical label gives clear information to the user.

Offset printing allows them to have a strong wear resistance over time.

Of all shapes and sizes, they can be delivered individually or in panel.

Basic Information	Standard	Standard		
GENERAL				
Maximum dimensions:	400mm x 350mm	650mm x 500mm		
Minimum thickness:	0.125mm	Same		
Type of printing:	Digital printing (CMJN)	Screen-printing		
Type of finishing:	Structured Polished With doming	Same		
Type of varnish:	Translucent Infrared Clear Textured	Same		
Color range:	Pantone / RAL	Same		
Number of colors:	Illimited	Same		
Material type and thickness:	PET [75µm-375µm] Polycarbonate [125µm – 500µm] PMMA [0.8mm – 5mm] PU [300µm -600µm]	Same		
Optional coating characteristics:	Anti-scratch Anti-microbial Anti-glare UV-resistant	Same		
ADHESIVE				
Type of adhesive	Acrylic Acrylic + Silicone Low surface tension Screen-printing glue	Same		
Thickness:	[50µm - 350µm] 3M	Same		
Colors:	Transparent Opaque (grey/white) Opaque (black)	Same		
CONDITIONNING				
Type of conditioning	Unit In panel (several labels on a sheet)	Same		

### **Technical capability summary**

## **Optional coating**

Material	Type of finishing	Anti-scratch	Anti- microbial	Anti-glare	UV-resistant
Polycarbonate [125μm – 500μm]	Polished	Optional	No	No	No
	Structured	No	No	No	No
<b>PET</b> [75μm-375μm]	Polished	Optional	Optional	Optional	No
	Structured	Yes	Optional	No	Optional
<b>PMMA</b> [0.8mm – 5mm]	Polished	Optional	No	No	Yes
	Structured	No	No	Yes	Yes
<b>PU</b> [300μm -600μm]	Structured	No	No	No	No