



**50.0" PCAP Solution
12050170
eTP500W3419-PS**

Doc. - Revision: 000

Date: 2022-03-04

Table of contents

1 Revision History 2

2 Scope 3

3 Touch Sensor and Cover Glass 3

 3.1 Technical Parameters..... 3

 3.2 Reliability Tests..... 4

4 Recommended Touch Controller 4

5 Optical Inspection Criteria and Handling Recommendations 4

 5.1 Optical Inspection Criteria..... 4

 5.2 Handling Recommendations 4

6 Appendix A: Technical Drawing 5

1 Revision History

Doc. - Revision	Date	Author	Changes
000	2022-03-04	T. Golling	initial version

2 Scope

DATA MODUL's PCAP solution 12050170 consists of a 50.0" capacitive touch screen. Please note that this is only a sub-assembly of the final product. The specification of the final product might differ from this specification.

3 Touch Sensor and Cover Glass

3.1 Technical Parameters

Touch Sensor	
Screen size	50.0 inch / 127.0 cm
Format	wide
Composite	Glass / Film / Film
Active area	1104.84 x 625.41 mm (WxH)
Bending radius of tail	R = 2 mm recommended
Tail connector	2x HIROSE, TF06L-80S0.5SH(800) 2x HIROSE, TF28A-96S-0.5SH
Cover Glass	
Material	Soda-Lime (Thermal strengthen)
Thickness	3.8 mm
Outline dimensions	1157.70 x 679.30 x 4.29 mm (WxHxT)
Viewing area	1095.84 x 616.41 mm (WxH)
Surface	AG (Etching type) / Gloss 80±15 Gu
Surface hardness	≥6H
Printing	black (RAL9005)
Transparency	≥80% (min.)
Haze	≤10% (max.)
Temperature Ranges	
Operating temperature and humidity	-20 ~70°C, 20 ~80% RH
Storage temperature and humidity	-20 ~70°C, 10 ~90% RH

3.2 Reliability Tests

Low Temperature Storage Test	-20°C / 96h
High Temperature Storage Test	70°C / 96h
High Temperature / High Humidity Test	40°C, 90% RH for 96h
Thermal Shock Test	-20°C / 70°C, 60min each, 5 cycles

4 Recommended Touch Controller

The recommendation for this PCAP solution is a controller based on ILI2316. Please ask your local DATA MODUL sales representative for further details.

5 Optical Inspection Criteria and Handling Recommendations

5.1 Optical Inspection Criteria

For details on the optical inspection criteria, please refer to DATA MODULs Outgoing Spec or ask your local DATA MODUL sales representative.

5.2 Handling Recommendations

Precautions for operation

- Do not put a heavy, hard or sharp object on the product
- Do not bend the product in order to assure the reliability
- Do not put one product on the other. Otherwise, it may cause the product to be scratched
- Do not use any organic solvent acid or alkali solution.

Precautions for mounting

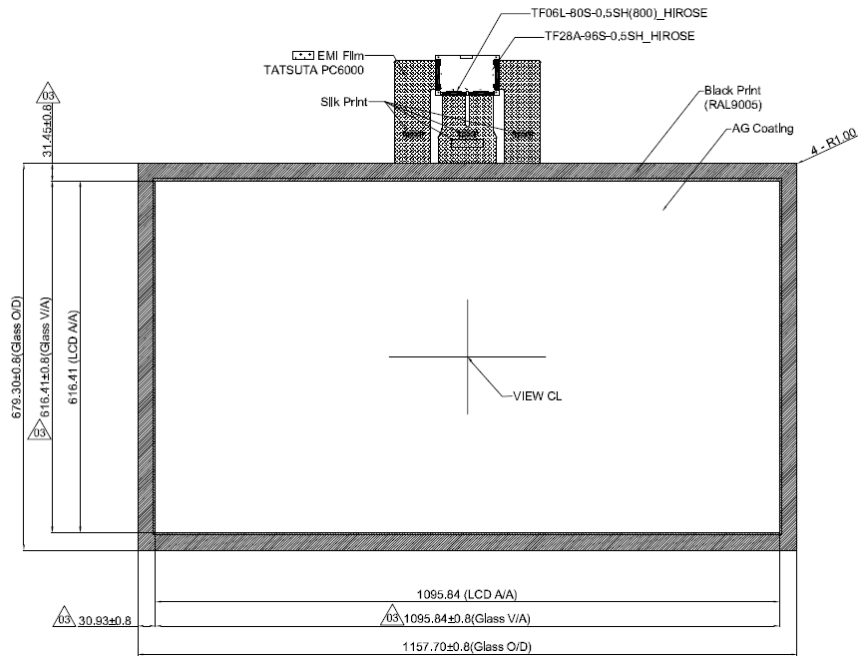
- The panel should be mounted using a configuration that either holds the panel by all four corners or by all four sides
- The bezel edge must be positioned outside the active area. The bezel may cause false activation if the edge overlaps the active area
- Any mounting configuration should ensure that there is no twisting force applied to the panel
- 1mm distance between TFT screen and touch panel is recommended

Precautions for tail

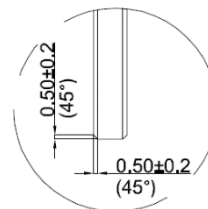
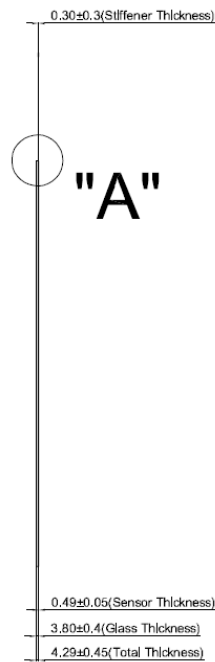
- In order to avoid damaging and malfunction of the sensor, please don't bend the FPC area next to the panel
- Excess or repeated bending of the FPC connector should also be avoided

6 Appendix A: Technical Drawing

Front View



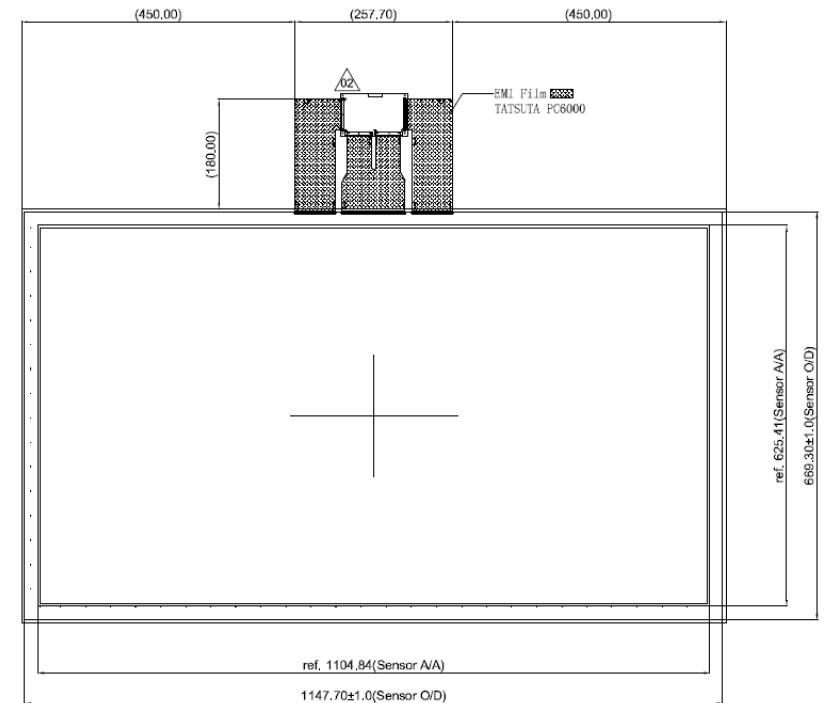
Side View



Detail "A"

SCALE - 18:1

Back View





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