

- Commitment to environmental preservation

ISO14001

- TOPPAN ELECTRONICS PRODUCTS CO.,LTD KOCHI Plant Certified in 1998
- ORTUSTECH (MALAYSIA) SDN.BHD.: Certified in 2014

Environmentally Friendly Products

Toppan group established the Toppan Standards for Environmentally Friendly Products and only the products which meet all of the criteria in this Standard can be certified and registered as "Environmentally Friendly Products". All ORTUSTECH brand products proudly gain this certification.

Prevention of Global Warming

■ Reduction of Greenhouse Effect Gases

·Usage of NF3 (nitrogen trifluoride) in TFT-LCD manufacturing process was abolished in 2005

·Usage of SF6 (sulfur hexafluoride) in TFT-LCD manufacturing process was abolished in 2012

·The first factory in the world to replace above greenhouse gases into COF2 (carbonyl fluoride) which has a highly effect to prevent global warming

■ Ozone Layer Protection

·Awarded the Jury's Special Award of "9th Protect the Ozone Layer, Prevent Global Warming Grand Prizes" (2008)

■ Actions for Energy Saving

Continuous activities for energy saving; including, central supply of Clean Dry Air (CDA) to the whole factory and renewal to high-efficiency motors.

Recycling of Resources

■ Reduction and Recycling of waste

·Zero-Emission manufacturing system (ZE accomplished in 2014)

·Zero-Emission: Landfilled waste shall be <1% of total amount of generated waste (ORTUSTECH definition)

■ Prevention of Water and Land Pollution

·The water used in manufacturing process is cleaned up to the drinkable level and then throw into local rivers.



The Toppan Group Declaration on the Global Environment

As responsible members of international society, we who work within the Toppan Group strive to realize a sustainable society through forward looking corporate activities with consideration for the conservation of the global environment.

Basic Principles

1. We observe all laws, regulations and in-company rules relating to the environment.
2. For the future of the Earth, we strive for the effective utilization of limited resources and the reduction of all types of environmental burden.
3. With foresight, we promote the development and widespread use of products that show consideration for the environment, and contribute to the environmental activities of customers.
4. We engage in communication related to the environment with a wide range of peoples both inside and outside the company, and strive for mutual understanding.
5. We also take a proactive approach to environmental conservation in corporate activities in international society.

Established in April 1992 Revised in April 2009

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ORTUS TECHNOLOGY CO., LTD. was merged with TOPPAN PRINTING CO., LTD. Electronics Division, ORTUS Business Unit as of April 1st, 2019.

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Products

<https://www.toppan.co.jp/electronics/ortustech>

TOPPAN PRINTING CO.,LTD.

Business Location

Sales and Design Offices

TOPPAN PRINTING CO., LTD. Electronics Division,Ortus Subdivision
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ISO9001/14001 Certified



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ORTUSTECH

Liquid Crystal Display



The contents of this catalog are accurate as of September 2019.

**Sunlight Readable
Low Power
Consumption**

Wide variety of sunlight readable and low power consumption TFT-LCD lineup to meet the diverse needs and applications.

**Long-term Stable
Supply**

Long-term continuous product supply by a selective use of long-term available components/materials.

ORTUSTECH Creative technology will

High-Mix/Low-Volume Production

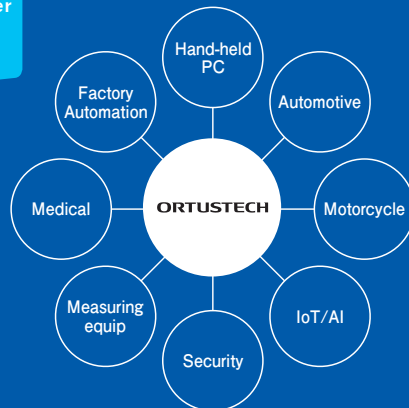
Flexible high-mix/low-volume production system to meet customer's various demands.

**Customer-oriented
Support System**

Responsive communication/feedback and flexible customer support.

**Customized Product
Support**

ORTUSTECH will propose a customized LCD design with incorporating customer's specific requirements.



open up the way for new Display world

202X

Ultimate Next Generation Display

High-quality display to go bending, floating and more...

2018

Blanview-R

Superior sunlight readability with high reflection performance

2016

Hybrid Blanview

Monochrome and Full-color switchable display

2012

New-Blanview (2nd Gen. Blanview)

Further advanced Low Power & Sunlight Readability

2010

Ultra High Definition LCD

4.8"-size World's smallest FHD (as of 2010)

2008

Blanview LCDLCD (1st Gen. Blanview)

Low Power Consumption + Sunlight Readability

2002

High-reliability LCD

Aircraft cockpit display

1994

HAST(high aperture ratio, High transmittance) LCD
Low-power LCD for Portable TV, Digital Camera, Camcorder, etc

Blanview is ORTUSTECH's original TFT-LCD technology to realize high-quality display performance in any brightness circumstances (indoor / outdoor) with overwhelming low power consumption

Unique High Reflection Panel Design

Superior Outdoor Readability

Ultra Low Power Consumption



Outdoor (Under Sunlight)



Indoor



Indoor

Transmissive TFT-LCD

Crispy and bright display created by a backlight



Outdoor

Transmissive TFT-LCD

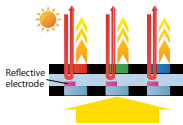
Display performance deteriorate by a sunlight reflection at LCD surface



Outdoor

Transflective TFT-LCD

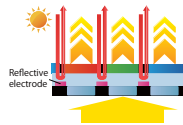
Reflection area works to improve outdoor display quality but leads to large power consumption in indoor usage



Outdoor

New-Blanview

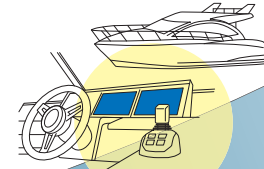
High light reflection panel design along with low power consumption functionality; Good display performance in any surrounding situations



Evolution of Blanview

Blanview technology keeps on evolving its display performance (sunlight readability and low power consumption) with expanding the variety of Blanview products.

Blanview family will provide additional values to your next generation product.



Hybrid Blanview



Blanview-R
Next generation Blanview with further improved light reflection performance

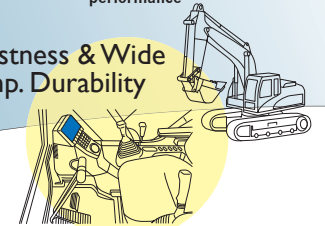
New-Blanview
Contrast, Reflectance & Color Purity improved

Robustness & Wide Temp. Durability

Blanview



Robustness-improved New Blanview
- Wide Temp. Operation (-30°C to +85°C)
- Strong Vibration Durability (6.8G)



Giantplus Technology - TOPPAN Group Company

ORTUSTECH





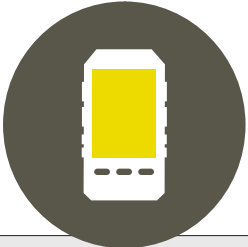



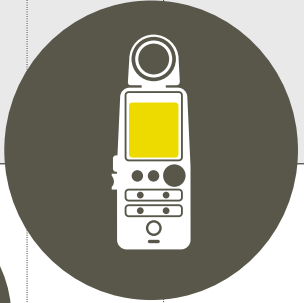
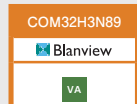
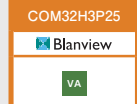

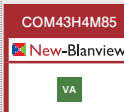




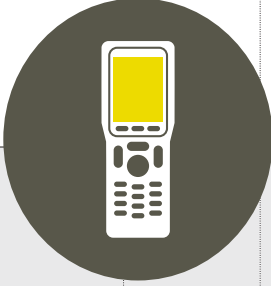




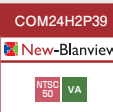



TOPPAN PRINTING CO.,LTD (ORTUSTECH) announced to acquire the shares of Giantplus Technology Co., Ltd. and Giantplus became a subsidiary of TOPPAN. The group will leverage TOPPAN's unique display technologies and Giantplus's volume production technologies effectually to expand business and presence worldwide.

Giantplus Technology Profile

- Headquarters No.15 Industrial Rd., Toufen, Miaoli, Taiwan
- Industry LCD Products Manufacturing and Sales
- Capital 4,415 Million NTD
- Founded December 15th, 1997
- Main Factories Taoyuan (TW), Shenzhen (CN), Kunshan (CN)






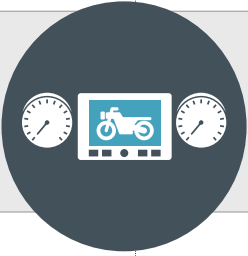
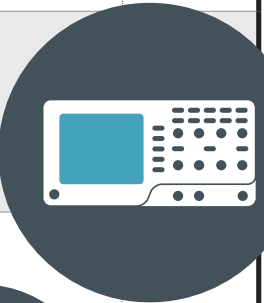



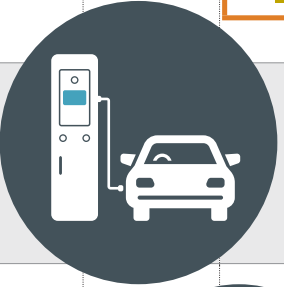

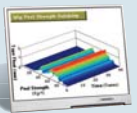
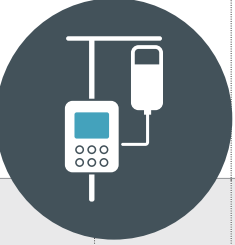



Portrait Type LCD

	2.0"	2.2"	2.4"	2.7"	3.2"	3.5"	3.7"	4.0"	4.3"	4.8"	5.0"
HD 720xRGBx1280 										 COM48H4N22 New-Blanview NTSC 50 VA	 COM50H5N03 New-Blanview NTSC 50 VA
WVGA 480xRGBx800 					 COM32H3N89 Blanview VA  COM32H3P25 Blanview VA		 COM40H4N40 New-Blanview NTSC 50 VA  COM43H4M85 New-Blanview VA  COM43H4N10 New-Blanview NTSC 50 VA				
VGA 480xRGBx640 						 COM35H3P29 New-Blanview NTSC 50 VA					
QVGA 240xRGBx320 	 COM20T2P31 Transmissive VA	 COM22H2P16 New-Blanview VA	 COM24H2P39 New-Blanview NTSC 50 VA	 COM27H2P37 New-Blanview NTSC 50 VA  COM27H2P40 New-Blanview NTSC 50 VA		 COM35H3P17 New-Blanview NTSC 50 VA					

WV Wide viewing angle TN mode
 VA Wide viewing angle High image quality VA mode
 All in One All-in-One
 NTSC 50 NTSC 50%

*The pictures shown in the screens are simulated images.

Landscape Type LCD

	2.2"	3.3"	3.5"	4.1"	4.3"	5.0"	5.7"	6.0"	6.5"	7.0"~
WVGA 800xRGBx480 						COM50H5N01 New-Blanview NTSC 50 VA WIDE 6.8G LED				COM70H7M24 New-Blanview NTSC 50 VA WIDE 6.8G LED
VGA 640xRGBx480 						COM57T5M54 Transmissive WV All in One LED		COM65T6M13 Transmissive WV All in One		
HVGA 640xRGBx240 								COM60H6M10 Blanview All in One		
WQVGA 480xRGBx272 					COM43H4N44 New-Blanview NTSC 50 VA WIDE 6.8G					
QVGA 320xRGBx240 	COM22H2P22 Blanview		COM35H3P04 Blanview WV	COM41H4N08 Blanview WV		COM50H5M81 Blanview WV				
HQVGA 120xRGBx320 		COM33T3N71 Transmissive WV								

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