



OUR GLOBAL  
COMPETENCE  
CENTRES

 APOLLO DISPLAY  
TECHNOLOGIES



 DISTEC



 DISPLAY  
TECHNOLOGY



# Catalogue

## Ortustech

### Blanview TFT Display 2020

## Blanview Technology

### Optimal Display Solution for ... Handheld Device ... Outdoor Applications

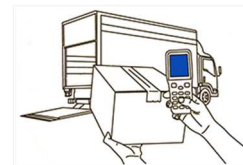


**Blanview = Sunlight Readable + Low Power Consumption**

**Blanview** is Toppan's unique TFT-LCD technology enabling the display to create high contrast and crisp images even in bright circumstances where a sunlight hit to display surface directly. With leveraging Toppan's high-quality amorphous silicon (a-Si) technology "HAST" (Hyper Amorphous Silicon TFT), Toppan succeeded in generating new type TFT-LCD with a good balance between 2 values - "Sunlight Readable" and "Low Power Consumption"

#### Blanview Advantages

1. Good display readability in outdoors/bright environments
2. Keeping low power consumption in any ambient luminance conditions
3. High image quality in indoors/dark environments on the same level as standard transmissive-type LCD
4. Less display performance variation between indoor and outdoor conditions



Handheld Computing



Radio Communication



Factory Automation (FA)



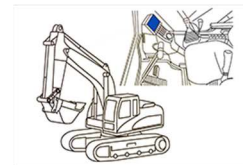
Measurement



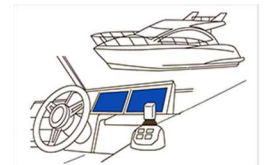
Medical



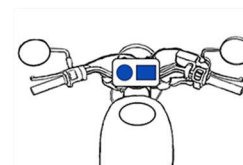
Wearable



Commercial Vehicle



Outdoor Sports / Marine



Motorcycles / Bicycle



EV Charger / Outdoor POS

## Blanview Technology

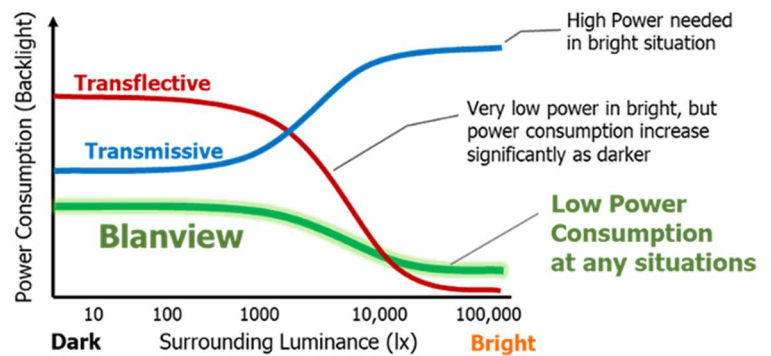
### Sunlight Readability

Blanview's hybrid use of sunlight and backlight enables to increase sunlight readable functionality. Right picture was taken at the place where the sunlight hits to the display surface. (Left: Blanview, Right: standard transmissive LCD)  
Apparently Blanview LCD gives higher contrast crisp image than standard LCD.

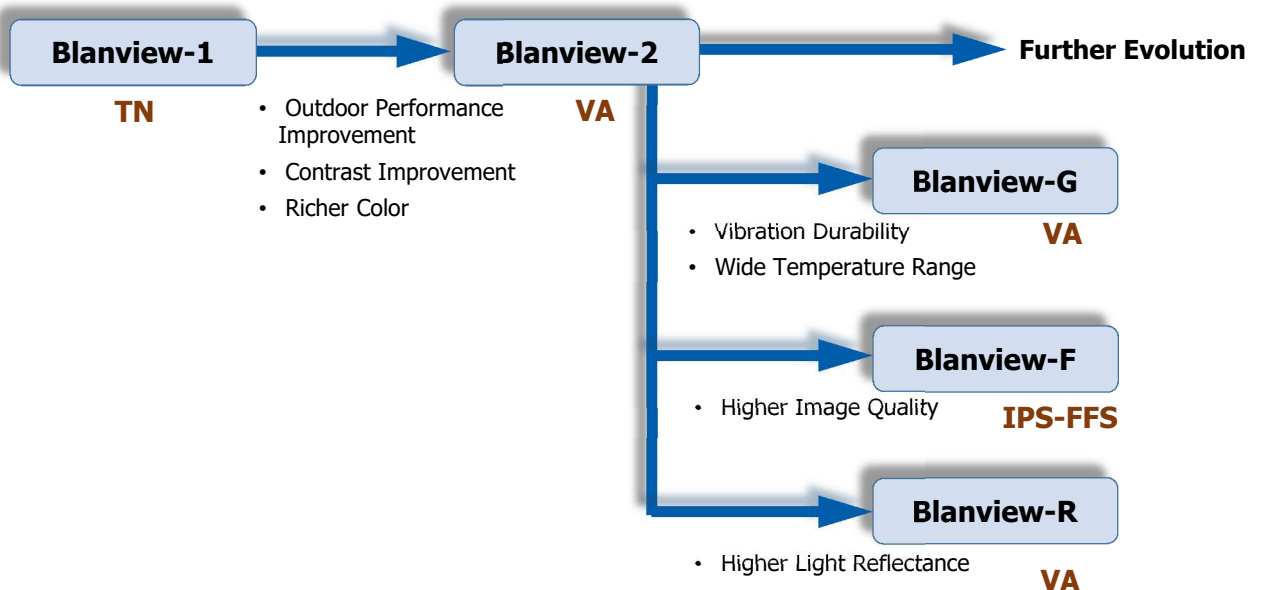


### Low Power Consumption

Blanview is low power! Other LCD technologies generally require to increase backlight power to secure enough display visibility. Blanview can acquire high visibility with low power consumption in any bright situations... indoor, outdoor, anywhere! Blanview technology can extend a battery life of your product.



### Blanview Family Roadmap



Note) Blanview-2 was called as "New Blanview" before.

# Blanview Technology

## Standard Products

Size	Format	Part Number	Resolution	Technology	LC Mode	Data Interface	Brightness (cd/m <sup>2</sup> )	Contrast	Temp.	Touch Function	Remarks
2.0"	Portrait	COM20T2P31ILC	240x320	Transmissive	VA	16bit CPU 18bit RGB	450	800			
2.2"	Portrait	COM22H2P69ULC	240x320	Blanview-2	VA	18bit CPU	400	800			
2.2"	Landscape	COM22H2P22DLC	320x240	Blanview-1	TN	18/24bit RGB	300	400			
2.4"	Portrait	COM24H2P39ULC	240x320	Blanview-2	VA	18bit CPU	300	800			
2.4"	Portrait	COM24H2P71ULC	240x320	Blanview-2	VA	18bit RGB	270	800	Wide		
2.7"	Portrait	COM27H2P63ULC	240x320	Blanview-2	VA	18bit RGB	350	800			
2.7"	Portrait	COM27H2P64UTC	240x320	Blanview-2	VA	18bit RGB	280	800		Resistive	
2.7"	Portrait	COM27H2P40ULC	240x320	Blanview-2	VA	18bit CPU	350	800			
2.7"	Portrait	COM27H2P41UTC	240x320	Blanview-2	VA	18bit CPU	280	800		Resistive	
3.2"	Portrait	COM32H3P71ULC	480x800	Blanview-1	VA	24bit RGB	380	1000			
3.2"	Portrait	COM32H3P68ULC	480x800	Blanview-2	VA	8bit MIPI	(400)	(700)			Under Develop
3.5"	Portrait	COM35H3P42ULC	240x320	Blanview-2	VA	18bit RGB	250	800			
3.5"	Portrait	COM35H3P43UTC	240x320	Blanview-2	VA	18bit RGB	200	800		Resistive	
3.5"	Portrait	COM35H3P44ULC	480x640	Blanview-2	VA	18bit RGB	330	800			
3.5"	Portrait	COM35H3P70ULC	480x640	Blanview-2	VA	8bit MIPI	900	900			
3.5"	Portrait	COM35H3P45UTC	480x640	Blanview-2	VA	18bit RGB	265	800		Resistive	
3.5"	Landscape	COM35T3N94GLC	320x240	Transmissive	TN	18/24bit RGB	400	200			
3.5"	Landscape	COM35T3N95GTC	320x240	Transmissive	TN	18/24bit RGB	320	200		Resistive	
3.5"	Landscape	COM35H3P58ULC	320x240	Blanview-2	VA	24bit RGB	(600)	(700)	Wide		6.8G Vibration, Under Develop
3.7"	Portrait	COM37H3P46ULC	480x640	Blanview-1	VA	18bit RGB	320	600			
3.7"	Portrait	COM37H3P47UTC	480x640	Blanview-1	VA	18bit RGB	270	600		Resistive	
4.0"	Portrait	COM40H4N40ULC	480x800	Blanview-2	VA	8bit MIPI	490	600			
4.1"	Landscape	COM41T4N05GLC	320x240	Transmissive	TN	18/24bit RGB	450	200			
4.1"	Landscape	COM41T4N06GTC	320x240	Transmissive	TN	18/24bit RGB	360	200		Resistive	
4.1"	Landscape	COM41H4N08XLC	320x240	Blanview-1	TN	18/24bit RGB	350	200			
4.3"	Portrait	COM43H4N90ULC	480x800	Blanview-2	VA	18bit RGB	400	600			
4.3"	Portrait	COM43H4N91UTC	480x800	Blanview-2	VA	24bit RGB	320	600		Resistive	
4.3"	Portrait	COM43H4N66ULC	480x800	Blanview-2	VA	8bit MIPI	300	600			
4.3"	Portrait	COM43H4N98UTC	480x800	Blanview-2	VA	8bit MIPI	(325)	(600)		PCAP	Under Develop
4.3"	Landscape	COM43T4N95VLC	480x272	Transmissive	TN	24bit RGB	500	350			
4.3"	Landscape	COM43H4N02XLC	480x272	Blanview-1	TN	24bit RGB	450	400			
4.3"	Landscape	COM43H4N03XTC	480x272	Blanview-1	TN	24bit RGB	350	400		Resistive	
4.3"	Landscape	COM43H4N44ULC	480x272	Blanview-2	VA	24bit RGB	600/1100	800	Wide		6.8G Vibration
4.8"	Portrait	COM48H4N22ULC	720x1280	Blanview-2	VA	8bit MIPI	300	700			
5.0"	Portrait	COM50H5N03ULC	720x1280	Blanview-2	VA	8bit MIPI	400	800			
5.0"	Landscape	COM50H5M81XLC	320x240	Blanview-1	TN	18/24bit RGB	450	400			
5.0"	Landscape	COM50H5N15ULC	800x480	Blanview-2	VA	6/8bit LVDS	430/830	700	Wide		6.8G Vibration
5.7"	Landscape	COM57T5M21ZLC	320x240	Transmissive	TN	18/24bit RGB	600	400			
5.7"	Landscape	COM57T5N07RSC	640x480	Transmissive	IPS-FFS	18bit RGB	500	1000			
5.7"	Landscape	COM57H5M86KLC	640x480	Blanview-1	TN	18bit RGB	550	600			
6.5"	Landscape	COM65T6M14KLC	640x480	Transmissive	TN	18bit RGB	400	400			
6.5"	Landscape	COM65T6M13KSC	640x480	Transmissive	TN	18bit RGB	400	400			
7.0"	Landscape	COM70H7M24ULC	800x480	Blanview-2	VA	6/8bit LVDS	400/790	700	Wide		6.8G Vibration
7.0"	Landscape	COM70H7M40ULC	800x480	Blanview-2	VA	6/8bit LVDS	400	700	Wide		
7.0"	Landscape	COM70H7M44UTC	800x480	Blanview-2	VA	6/8bit LVDS	(350/700)	(700)	Wide	PCAP	Under Develop
10.4"	Landscape	COM104H9M11xxx	800x600	Blanview-F	IPS-FFS	6/8bit LVDS	(650)	(1000)			Under Develop
10.4"	Landscape	COM104H9M12xxx	800x600	Transmissive	IPS-FFS	6/8bit LVDS	(650)	(1000)			Under Develop
10.4"	Landscape	COM104H9M10xxx	800x600	Transmissive	IPS-FFS	6/8bit LVDS	(580)	(1000)		PCAP	Under Develop

Wide : Op.: -30~+85 °C, St.: -40~+95 °C  
Blank : Op.: -20~+70 °C, St.: -30~+80 °C

For more product information, please go to: <https://www.toppan.co.jp/electronics/ortustech/english/>

Our company network supports you worldwide with offices in Germany, Austria, Switzerland, the UK and the USA. For more information please contact:

## Headquarters

### Germany



#### FORTEC Elektronik AG

Augsburger Str. 2b  
82110 Germering

Phone: +49 89 894450-0  
E-Mail: [info@forteca.de](mailto:info@forteca.de)  
Internet: [www.forteca.de](http://www.forteca.de)

## Fortec Group Members

### Austria



#### Distec GmbH Office Vienna

Nuschinggasse 12  
1230 Wien

Phone: +43 1 8673492-0  
E-Mail: [info@distec.de](mailto:info@distec.de)  
Internet: [www.distec.de](http://www.distec.de)

### Germany



#### Distec GmbH

Augsburger Str. 2b  
82110 Germering

Phone: +49 89 894363-0  
E-Mail: [info@distec.de](mailto:info@distec.de)  
Internet: [www.distec.de](http://www.distec.de)

### Switzerland



#### ALTRAC AG

Bahnhofstraße 3  
5436 Würenlos

Phone: +41 44 7446111  
E-Mail: [info@altrac.ch](mailto:info@altrac.ch)  
Internet: [www.altrac.ch](http://www.altrac.ch)

### United Kingdom



#### Display Technology Ltd.

Osprey House, 1 Osprey Court  
Hichingbrooke Business Park  
Huntingdon, Cambridgeshire, PE29 6FN

Phone: +44 1480 411600  
E-Mail: [info@displaytechnology.co.uk](mailto:info@displaytechnology.co.uk)  
Internet: [www.displaytechnology.co.uk](http://www.displaytechnology.co.uk)

### USA



#### Apollo Display Technologies, Corp.

87 Raynor Avenue,  
Unit 1 Ronkonkoma,  
NY 11779

Phone: +1 631 5804360  
E-Mail: [info@apolloDisplays.com](mailto:info@apolloDisplays.com)  
Internet: [www.apolloDisplays.com](http://www.apolloDisplays.com)