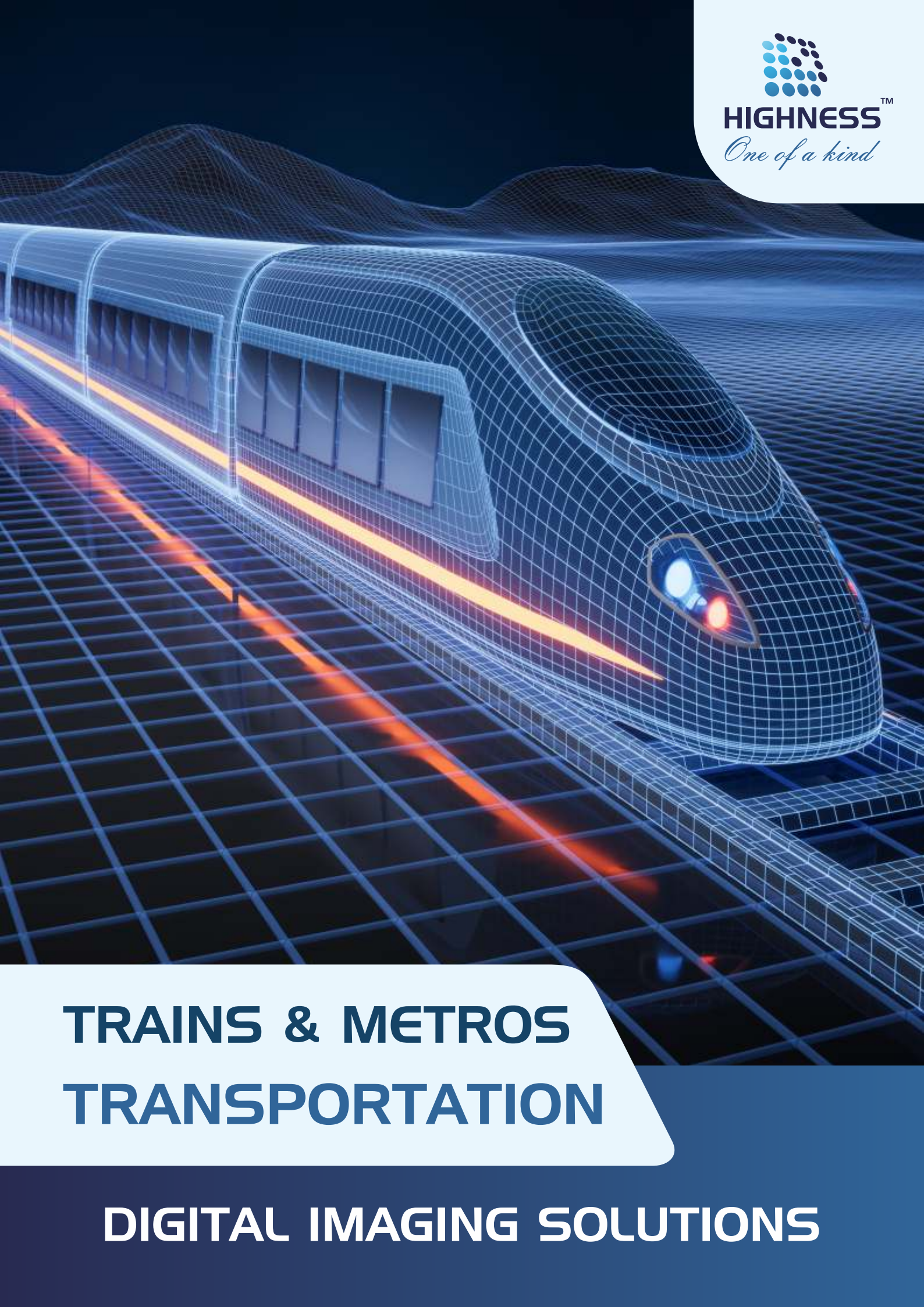




HIGHNESS™

One of a kind



TRAINS & METROS TRANSPORTATION

DIGITAL IMAGING SOLUTIONS



HighnessMicro has developed products suitable for harsh conditions such as Displays and Controllers for high vibration, extremely harsh operating temperature and rainy conditions etc. Some of the retrofit products has helped Railway systems to reduce overall revamp costs and scale up to new display products within the existing design. Over

several years, our flagship products are Displays for Automatic Fare Collection (AFC), Driver Display Units (DDU), Passenger Information Systems (PIS), Passenger Announcement & Passenger Information Systems (PAPIS), Route Finder, Locomotive Navigation System, Synchronization System for Driverless Trains etc.

PASSENGER INFORMATION SYSTEM (PIS) DISPLAYS ✱
 DUAL SIDED PANEL DISPLAYS ✱
 DUAL SIDED STRETCH DISPLAYS ✱
 DYNAMIC ROUTE MAP DISPLAYS (DRMD) ✱

✱ DISPLAY FOR TICKET VENDING
 ✱ DRIVER DISPLAY UNIT (DDU) FOR LOCO CABIN
 ✱ STATION & OUTDOOR DISPLAYS / PIDS
 ✱ DISPLAYS CONTROLLERS



DISPLAYS FOR PA & PIS

WITH DATA STREAMING ON
ETHERNET OR Wi-Fi



Size	10.1"	18.5"	18.5"	21.5"	32"
Resolution	1280 x 800	1366 x 768	1920 x 1080		
Brightness (cd/m ²)	400	500 ~ 900			
Operating System	Android				
Surface (Optional)	Toughened Glass				
	Multi Touch Projected Touch Screen				
Built in System	Processor - Quad Core Cortex-A17, up to 1.8GHz				
	RAM - 2GB (4GB Max), SSD - 16GB (32 Max)				
Controller (Optional)	Embedded Boards/SBC (Data streaming through Ethernet, Wi-Fi and Bluetooth)				
Input Power	110V DC				

OLED TRANSPARENT DISPLAYS

ENCAPSULATED INSIDE
GLASS



Size	30"	55"
Display Type	Poly-Silicon TFT Active-Matrix OLED	
Resolution	1366 × 768	1920 × 1080
Brightness (cd/m ²)	600/200 (Center 1point, Typ.)	150/400 (Center 1point, Typ.)
Contrast	135,000:1	150,000:1
Surface Treatment	Hard Coating (2H),	
	Anti-Reflection Treatment of the front	
	Film (Reflectance Typ. 1.2%_TBD)	
Transparency	43%	40%
System	Android / Windows	
Touch Panel	Capacitive Touch / IR Touch	
Life Time	30,000 hour	
Input Power	AC110~220V	





OPEN FRAME DISPLAYS FOR AFC GATE

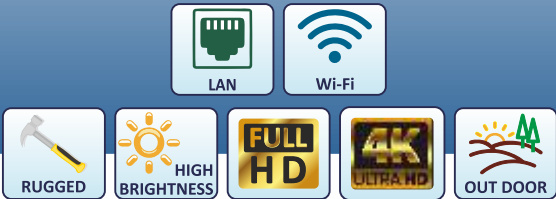


Size	6.4"	7"	10.1"
Contrast	1500:1	800:1	1000:1
Resolution	1024 x 768	1024 x 600	1280 x 800
Brightness (cd/m ²)	1400	500	400
Operating Temperature	-20°C to +70°C		
Input Interface	HDMI		
Surface	Toughened Glass		
Life Time	15,000 ~ 30,000 hours		
Mounting	Front Mounting		
IK Protection	UPTO IK 6		
IP Protection	UPTO IK 65 from front		
Input Power	12V DC		



STRETCHED DISPLAYS

FOR DYNAMIC
ROUTE MAP &
PASSENGER
INFORMATION
SYSTEM



Size	16.3"	24"	28"	29"	36.6"	48"	56.5"
Segment	Stretch Display			Stretch Display			
Resolution	1920 x 285	1920 x 360	1920 x 360	1920 x 540	1920 x 290	1920 x 320	3840 x 349
Brightness (cd/m ²)	500 ~ 900			500 ~ 900			
Operating System	Android			Android			
Surface	Toughened Glass			Toughened Glass			
Built in System	Processor - Quad Core, up to 1.8GHz			Processor - Quad Core Cortex-A17, up to 1.8GHz			
	RAM - 2GB (4GB Max), SSD - 8GB (32 Max)			RAM - 2GB (4GB Max), SSD - 8GB (32 Max)			
Controller (Optional)	Embedded Boards / SBC (Data streaming through Ethernet, Wi-Fi and Bluetooth)			Embedded Boards / SBC (Data streaming through Ethernet, Wi-Fi and Bluetooth)			
IK Protection	UPTO IK 6			UPTO IK 6			
IP Protection	UPTO IK 65 from front			UPTO IK 65 from front			
Input Power	DC 110V			DC 110V			

INDUSTRIAL GRADE DISPLAYS

FOR TICKETING & INFORMATION KIOSK



TICKET VENDING MACHINE

Size	15"	17"	18.5"	21.5"	24"
Segment	Open Frame Display			Open Frame Display	
Resolution	1280 x 1024 / 1920 x 1080			1920 x 1080	
Brightness (cd/m ²)	500 ~ 900			500 ~ 900	
Operating Temperature	-10 ^o to +60 ^o C			-10 ^o to +60 ^o C	
Operating System	Android			Android	
Surface (Optional)	Toughened Glass			Toughened Glass	
	Multi Touch Projected Touch Screen			Multi Touch Projected Touch Screen	
Built in System	Processor - Quad Core Cortex-A17, up to 1.8GHz			50,000 Hrs (Standard)	
	RAM - 2GB (4GB Max), SSD - 8GB (32 Max)			70,000 ~ 1,00,000 Hrs (Ruggedized)	
Controller (Optional)	Embedded Boards / SBC			Embedded Boards / SBC	
	(Data streaming through Ethernet, Wi-Fi and Bluetooth)			(Data streaming through Ethernet, Wi-Fi and Bluetooth)	



RUGGEDIZED DISPLAYS

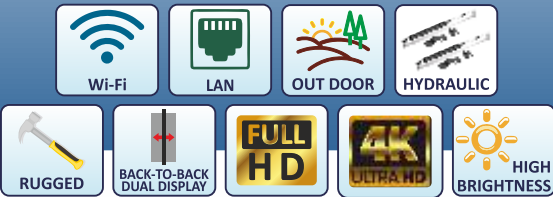
FOR PROPULSION
SYSTEM OR DRIVER
DISPLAY UNIT (DDU)



Size	7"	10.4"	12.1"	4" Circular Display
Segment	Industrial Grade Panel Mount Display		Industrial Grade Panel Mount Display	
Resolution	1024 x 600	1024 x 768		720 x 720
Brightness (cd/m²)	500 ~ 900	500 ~ 900		
Operating Temperature	-30°C to +80°C	-30°C to +80°C		
Surface (Optional)	Toughened Glass	Toughened Glass		
	Multi Touch Projected Touch Screen	Multi Touch Projected Touch Screen		—
Life Time	50,000 Hrs (Standard)	50,000 Hrs (Standard)		
	70,000 ~ 1,00,000 Hrs (Ruggedized)	70,000 ~ 1,00,000 Hrs (Ruggedized)		

LARGE SIZED HIGH- BRIGHTNESS DISPLAYS

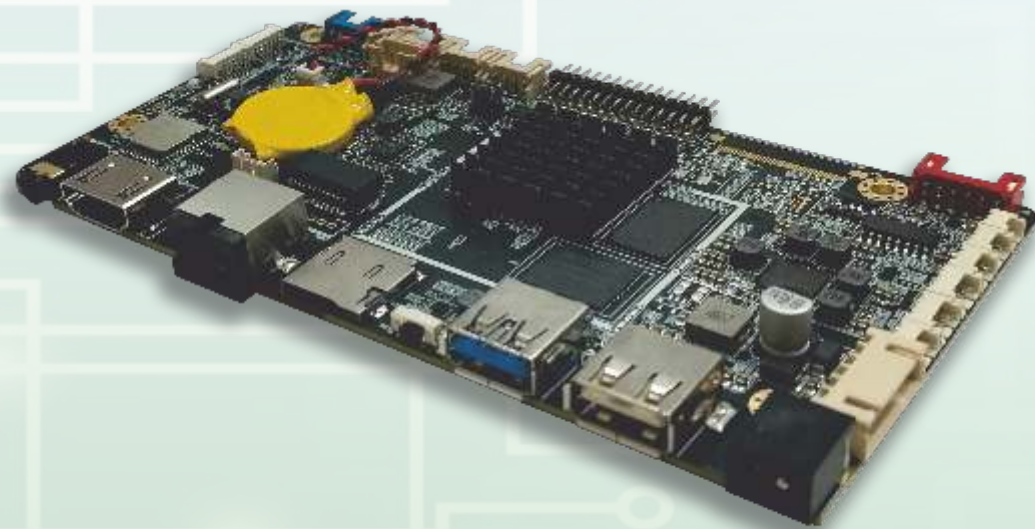
FOR PLATFORM
CONCOURSE WITH
HYDRAULIC CYLINDER
AMBIENT LIGHT SENSOR,
SUNLIGHT READABLE



Size	31.5"	43"	55"
Segment	Industrial Grade Embedded Display		Industrial Grade Embedded Display
Resolution	1920 x 1080		1920 x 1080 / 3840 x 2160
Brightness (cd/m ²)	1000		700 ~ 2000
Operating Temperature	-20°C to +70°C		0°C to +50°C
Operating System	Android		Android
Surface	Toughened Glass		Toughened Glass
Built in System	Processor - Quad Core Cortex-A17, up to 1.8GHz		Processor - Quad Core Cortex-A17, up to 1.8GHz
	RAM - 2GB (4GB Max), SSD - 16GB (32 Max)		RAM - 2GB (4GB Max), SSD - 8GB (32 Max)
Controller (Optional)	Embedded Boards / SBC (Data streaming through Ethernet, Wi-Fi and Bluetooth)		Embedded Boards / SBC (Data streaming through Ethernet, Wi-Fi and Bluetooth)

INDUSTRIAL GRADE EMBEDDED CONTROLLERS

FOR DATA STREAMING
ON ETHERNET OR Wi-Fi



CPU	Rock Chip RK3566UP to1.8GHz ~ 2.2GHz
RAM	2GB (Expandable to 4GB)
ROM	16GB (Expandable to 32GB)
Operating System	Linux / Android
Network	1 x 10M/100M Ethernet, Wi-Fi/BT4.1, Wireless, GPRS
I/O Port	3 x Serial - TTL
	1 x Serial - Rs232
	2 x USB
	1 x GPIO
Operating Temperature	-20 ~ +70°C
Power Input	12V DC



CPU	Intel® 11thTiger Lake-UP3 Processor (i3-1125G4/i5-1135G7/i7-1165G7, etc.)
Memory	Onboard 1 260 Pin DDR4 SO-DIMM memory slot; MAX 3200MHz; supports up to 32GB
Storage	1*M.2 M Key, support SATA3/PCIEX4 optional (need to jump resistor) 1*SATA3.0 (6Gb/s) slot
Backplane Interface	1 x AUDIO port 1 x DP+HDMI double-layer socket (DP on top and HDMI on bottom) supports 4K@60HZ 1 x REC button 2 x USB3.2 Gen2 (10Gbps) 1 x USB2.0 + 1 x USB3.2 1 x LAN1 port 1 x LAN2 port 1 x DC_IN
Built-in Interface	1 x F_AUDIO pin 1 x SPEAKER pin 3 x USB (expandable 6*USB2.0) 1 x F_PANEL pin 1 x GPIO pin (4-way) 1 x JPS2 header 1 x SATA connector 1 x SATA_PWR pin 1 x BKCL 1 x LVDS 1 x INVCN 6 x COM pins 1 x ATX Phoenix connector



WEBSITE



BROCHURE



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(Manufacturer reserves the sole right to change the specifications without prior notice.) (Touch screen will reduce the original luminance of the LCD display.)