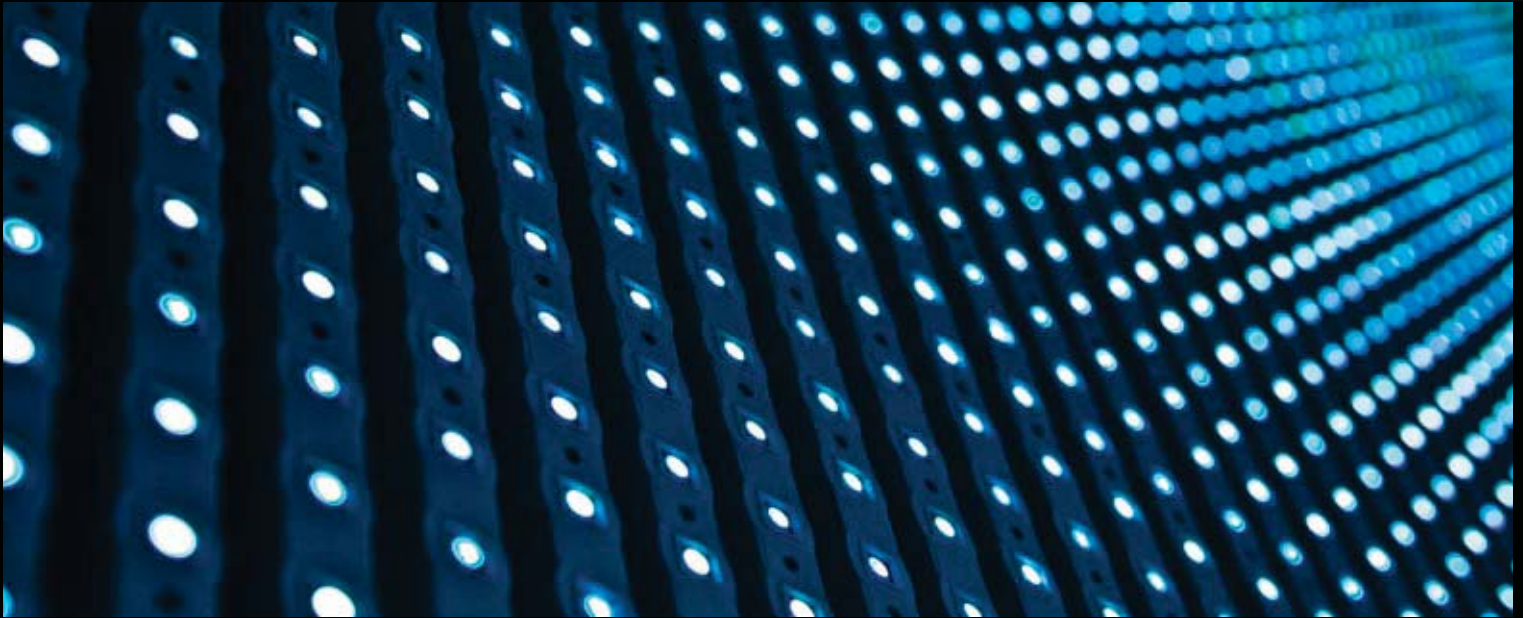


*Prominently Displayed*

# HYOCO OVERVIEW



## ABOUT HYOCO

Hyoco's LED displays exclusive manufacturing partner in Suzhou, China has been a leading force in the LED signage industry. Founded In 1984, Heston Yang, the visionary and inventor of the famous removable hybrid pixel operated this factory had created several revolutionary designs which have been used in the marketplace for years.

Honoring Heston's leadership and ideals, Hyoco continues to utilize his talented team to produce state of the art technology. We are the exclusive distributor offering a range of indoor and outdoor products in both standard and custom sizes.

With 25 years of accumulated manufacturing and design experience, ranging over 40,000 units installed throughout North, Central, and South Americas, withstanding heat, cold, and salt. Our products have been proven to endure extreme weather conditions and harsh environments.

And no doubt, under ASCE (American Society of Civil Engineers) governance, all of our products are rated for 120mph wind load.



### MAGNIFY BANK

HRP - Full Color  
Pitch Size: 20mm  
Matrix: 48 x 112

## LEVEL OF RETURN ON INVESTMENT

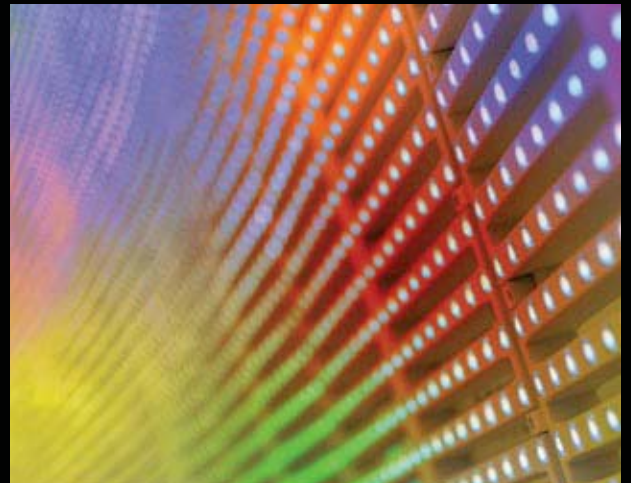
*"For businesses that choose to enhance their signage with an electronic message display, the owners typically see an increase in business of 15% to 150%."*

*United States Small Business Administration on signage for businesses*

US FACILITY



SUZHOU FACTORY



FORTS POND  
ELEMENTARY SCHOOL

HRP - Grayscale (RED)  
Pitch Size: 34mm  
Matrix: 24 x 64

DID YOU KNOW?

*"A normal driver has about a 25-degree cone-of-vision through the windshield as they are driving."*

*United States Small Business Administration on signage for businesses*

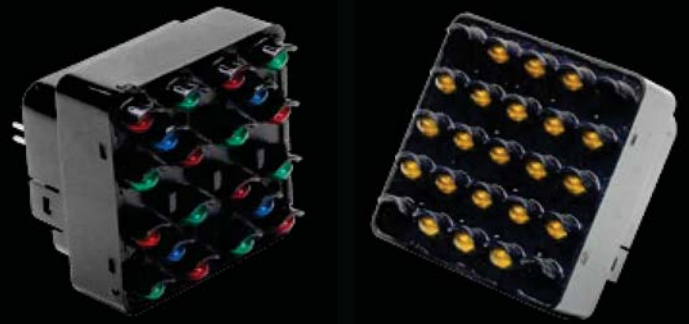


## HYOCO SIGNATURE DESIGN

### HYBRID PIXEL DESIGN

Hyoco's original pixel technology revolutionized the support functions required for a display. The hot-swappable hybrid design allowed modifications to the sign while lit; reducing time, cost, and effort required for servicing a display.

As the proud original manufacturer of the removable hybrid pixel, Hyoco continues to provide the brightest, easiest to service, proven product in the industry.



### LOUVER DESIGN

Hyoco's individual louver design is proven to maximize LED brightness against the sunlight.

Other products in the market only offer one cover over the entire LED strip inferior to Hyoco's individual louver design. This design allows the LED to perform at the maximum brightness and contrast; while optimizing the widest viewing angle and distance in the most energy-efficient mode.



**EVANGEL TEMPLE  
CHURCH**

IMP - Full Color  
Pitch Size: 10mm  
Matrix: 256 x 480

## LEVEL OF RETURN ON INVESTMENT

*"A digital billboard is an investment that has the potential to generate revenues 6 to 10 times greater than a static board."*

*Outdoor Advertising Magazine*

# HYOCO SIGNATURE COMPARISON

HYOCO HYBRID PIXEL



**HYOCO'S UNIQUE LOUVER DESIGN TO ACHIEVE MAXIMUM CONTRAST!**



OTHERS



**OTHER PRODUCTS IN THE MARKET**



WENDY'S

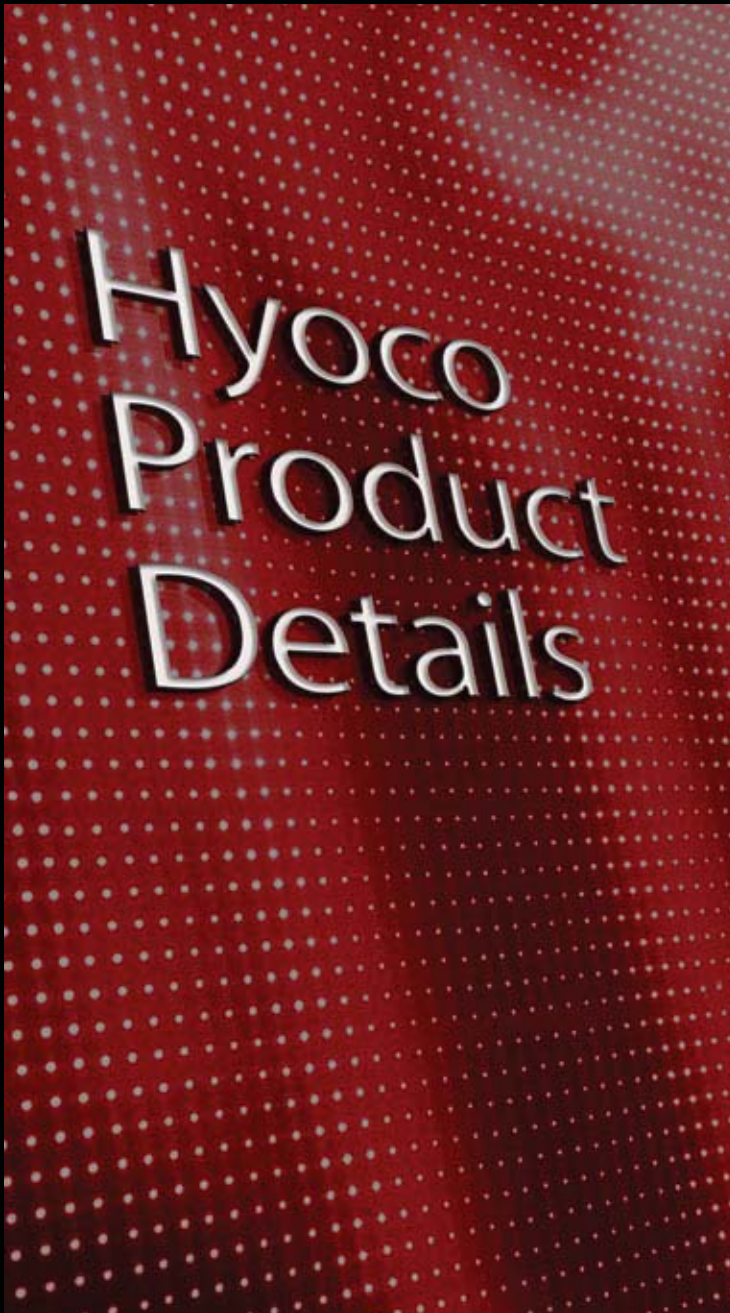
HRP - Full Color  
Pitch Size: 23mm  
Matrix: 48 x 112

## DID YOU KNOW?

*"... 55% of all retail sales are a result of impulse buys."*

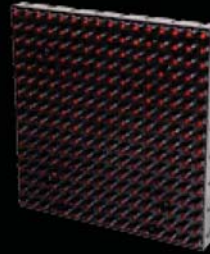
*"The spontaneous nature of the Quick Service Food (QSF) visits at 35% has implications for most business strategies, particularly advertising in the form of on-premise signage."*

*The United States Small Business Administration on signage for businesses*



## OUTDOOR DISPLAY - HPM SERIES

LIGHT WEIGHT FOR OUTDOOR ADVERTISING  
& SPECTACULAR CUSTOMERS



HPM is our new generation technology. With super light weight, ultra thin cabinet design and optional redundant power system, it is ideal for applications such as outdoor advertising, sports venues and spectacular displays. The 2' x 2' modules offer great flexibility when it comes to incorporating the display into your special digital signage design.

The HPM Series also takes Hyoco's signature removable pixel technology to the next level. Each of the HPM modules is made of 16 mini Smart Modules. Inside the 0.5" thin, palm sized Smart Modules resides all the electronics circuit boards driving the display. Whenever there is a failure, the HPM Series is easy to trouble shoot, without the need to open up the cabinet. Simply replace the removable mini Smart Modules and you are ready to go. The simplicity of the design is unmatched by any LED display products offered in the market today.

### HPM SERIES FEATURES

Housing	WPP Module
Service Access	Front & Rear
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	256 Levels
Wind Load Rate	100 mph
Minimum Modular Weight	20 lb
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F



### NOTTINGHAM FIRE DEPARTMENT

HRP – Monochrome  
(Red)  
Pitch Size: 17mm  
Matrix: 32 x 128

### DID YOU KNOW?

*"In U.S, there are on average 1.35 occupants per car, and each car travels about 15,000 miles per year. In addition, about 40 million Americans move annually to a new home."*

*The United States Small Business Administration on signage for businesses*

## OUTDOOR DISPLAY - HRP SERIES

HIGH PERFORMANCE FOR CUSTOMERS WHO WANT TO STAND OUT



HRP, the world famous original design of the removable pixel technology, is our signature product. Unlike various reverse engineered copies of our design, our HRP Series has been market proven for almost 10 years and withstood the most severe environments around the globe.

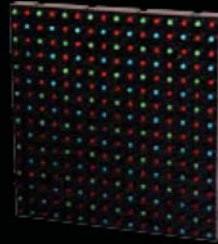
With individually removable pixels, replacing failed LED pixels can never be easier. You can replace the Hot Swappable Pixels while the display is still running, reducing time and effort of servicing failed LEDs. The HRP Series also offers various rock solid cabinet designs which can hold 140mph + wind load combined with our new controller system; it is capable of surviving the worst environments.

### HRP SERIES FEATURES

Housing	Single Enclosure / Block
Service Access	Front & Rear
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	256 Levels
Wind Load Rate	100 mph
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F

## OUTDOOR DISPLAY - PCB SERIES

STANDARD PRODUCT LINE FOR SMALL BUSINESS TO AGAINST ECONOMY



Hyoco's PCB Series competes directly with the standard 8 x 16 affordable modular products manufactured by most of the Asian manufactures today. Utilizing the same competitive cost, simple 8 x 16 standard modular design with special front LED panels boasting our unique individual small Louver to enhance the contrast and sunlight protection, Hyoco's PCB Series offers competitive cost while maintaining our unique product features.

Our PCB Series is available in 3 cabinetry options, single enclosure for ease of installation, modular cabinet for easier configuration and sectional blocks for larger applications. If you are in the market for the economical LED display products, Hyoco's PCB Series is the ideal product for you.

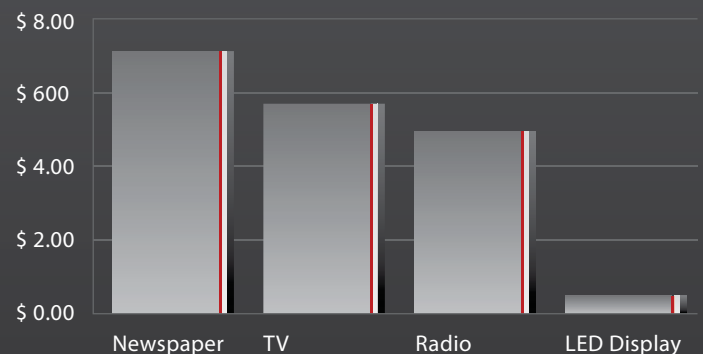
### PCB SERIES FEATURES

Housing	Single Enclosure / Module
Service Access	Front & Rear
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	256 Levels
Wind Load Rate	100 mph
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F



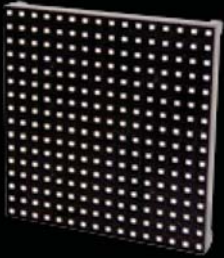
PCB – Full Color  
Pitch Size: 20mm  
Matrix: 48 x 112

### COST PER 1,000 EXPOSURES



## INDOOR DISPLAY - IMP SERIES

HIGH RESOLUTION FOR INDOOR  
OUTSTANDING PERFORMANCE



IMP Series is Hyoco's LED displays for indoor applications. With removable panel design, no training is required for servicing our IMP's display device.

### IMP SERIES FEATURES

Housing	Single Enclosure / Module
Service Access	Front & Rear
Color Capability	68.7 Billion
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 140° (Vertical)
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	256 Levels
Wind Load Rate	100 mph
Minimum Modular Weight	20 lb
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F

## DIGIT DISPLAY - GPC SERIES

GAS PRICE CHANGER FOR FUEL RETAILERS



Retail fuel operators face an increasingly volatile fuel market, making it difficult to keep the pricing on the outdoor signs remains competitive at all time. Hyoco provides the perfect solution! Superior quality Hyoco LED Gas Price Changer (GPC) is now available at a competitive price. With

a simple handheld remote control device, the operators can now respond instantly to rapid price fluctuations. The brightness of LED also ensures high distinctiveness and visibility even under strong sunlight or any luminous conditions. Standard sizes run from 12" to 72" in Red, Amber or Green; other custom sizes can also be made upon request.

### GPC SERIES FEATURES

Housing	Single Enclosure
Service Access	Front
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Control System	GPC-MB
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	10 Levels
Wind Load Rate	100 mph
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F



**MELBOURNE  
CITY HALL**

HRP - Grayscale (RED)  
Pitch Size: 17mm  
Matrix: 32 x128

### DID YOU KNOW?

*"Approximately 18.6% of American households relocate every year."*

*The United States Census Bureau*



## DIGIT DISPLAY - HPC SERIES

### HOTEL PRICE CHANGER FOR RESORT MARKET



To face the competitive resort market, Hyoco offers the unique Hotel Price Changer (HPC) digit device. Hyoco provides the perfect solution! Superior quality Hyoco LED Hotel Price Changer is now available at a competitive price. With a simple handheld remote control device, the operators can now respond instantly to rapid price fluctuations. The brightness of LED also ensures high distinctiveness

and visibility even under strong sunlight or any luminous conditions. Standard sizes run from 12" to 72" in Red, Amber or Green; other custom sizes can also be made upon request.

#### HPC SERIES FEATURES

Housing	Single Enclosure
Service Access	Front
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Control System	HPC-MB
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	10 Levels
Wind Load Rate	100 mph
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F

## DIGIT DISPLAY - T&T SERIES

### TIME AND TEMPERATURE DEVICE TO SERVE YOUR COMMUNITY



The United States Small Business Administration on signage for businesses says, " ...Time and Temperature display or an electronic variable message center can make your business a land mark in your community." Hyoco's Time & Temperature Series offers unique technology to serve our market at delivering effective and cost-competitive message device.

#### T&T SERIES FEATURES

Housing	Single Enclosure
Service Access	Front
LED Lifetime	100,000 + Hours
Optimal Viewing Angle	140° (Horizontal) X 50° (Vertical)
Power	100-240 VAC Single Phase 60 Hz
Display Dimming	10 Levels
Wind Load Rate	100 mph
Compliance Information	UL Listed
Operating Temperature	-25 F ~ 130 F



#### RIVER RUN PRESEVE

HRP - Monochrome  
(RED)  
Pitch Size: 17mm  
Matrix: 24 x 64

#### DID YOU KNOW?

*"It is estimated that 35%-50% of the consumer population today shops outside their local area."*

*The United States Small Business Administration on signage for businesses*



## CONTROL SYSTEM

### PHOENIX V09

Signature RGB Display Control System

- In / Output Voltage: 5V / 12V
- Output Way: Digital
- Dimension: 14" x 5" x 2"
- Remote Control Via Ethernet Communication
- Application Support Linux Operating System
- Noise Protection Technology
- Data Encryption
- Automatic Brightness Control

### KED

Signature Monochrome Display Control System

- In / Output Voltage: 5V
- Dimension: 5" x 5" Circuit Board
- 32 Shades or Grayscale
- Diagnostics
- Processor Driven
- Remote Control Via Ethernet Communication
- Application Support Linux Operating System



### MAGS

HRP - Full Color  
Pitch Size: 16mm  
Matrix: 64 x 128

## DID YOU KNOW?

*"On a street with traffic passing at 45 miles per hour, a car that is 500 feet in front of a given sign will have only 7.6 seconds to read the sign before it passes, under normal driving conditions."*

*The United States Small Business Administration on signage for businesses*



## CONTROL SOFTWARE

### HYIMPRESS

- Professional RGB / Grayscale display-controlled software
- Signature software for edit, schedule, and monitor displays
- Easy-to-use interface
- Abundant animation and graphic library
- Drag and Drop Functionality
- Multimedia Import Support
- Real Time Simple Text Player
- Multiple Playlist Support

### LED DESIGNER

- Professional Monochrome display-controlled software
- Signature software for edit, schedule, and monitor displays
- Easy-to-use interface
- Abundant animation and graphic library
- Remote communication via cell phone
- All in one Software
- Media Creation and Playback
- Temperature Offset
- Brightness Control: Automatic / Manual
- Java Based
- Real Time Troubleshooting Capabilities



NT-NET

HRP - Full Color  
Pitch Size: 20mm  
Matrix: 32 x 96

### DID YOU KNOW?

*"From a business owner's perspective, a sign should not be viewed as an expense, but as a capital investment. When you factor in your return on investment, signs are not expensive. An effective sign will most likely pay for itself many times over."*

*United States Small Business Administration on signage for businesses*

## STRATEGIC PARTNER

### DDS – DIGITAL DISPLAY SERVICE

DDS, Digital Display Services, is Hyoco's strategic partner. Products sold by all business under Hyoco Group will be served and maintained by DDS.

DDS specialized in providing services for digital displays and networking related business. DDS also provides consultation to all digital networking projects.

"... Our mission is to service all digital display and networking related products." excerpted from DDS official website, [www.hyoco-dds.com](http://www.hyoco-dds.com)



### DYNASCAN

DynaScan Technology Inc. is a world-leading manufacturer of innovative display solutions. Hyoco is preferred strategic partner with DynaScan. Also, we joint develop many award-winning displays for all commercial and advertising businesses.



### AQUATIC PARK



### MAGNIFY BANK

HRP - Full Color  
Pitch Size: 16mm  
Matrix: 48 x 112

### DID YOU KNOW?

*"On average, one additional on-premise sign resulted in an increase in annual sales revenues of 4.75%. And on average, one additional on-premise sign increased the annual number of transactions by 3.93%."*

*California Electric Sign Association (CESA) and the International Sign Association (ISA) commissioned a major study of on-premise signage performance by the University of San Diego, 1995*

# HYOCO PRODUCT SPECS | HPM & HRP

## HPM SPECIFICATIONS

MODEL NAME	WPP10	WPP16	WPP20	WPP25
Pitch	10 mm	16 mm	20 mm	25 mm
Pixel Configuration	1R	2R, 1G, 1B	2R, 1G, 1B	2R, 1G, 1B
Display Unit Size	16 x 16	8 x 8	8 x 8	8 x 8
Modular Cabinet Size (h) x (w)	64 x 64	32 x 32 or 40 x 32	32 x 32 or 40 x 32	24 x 24
Control System	Phoenix V09	Phoenix V09	Phoenix V09	Phoenix V09
Character Height	2.8"	4.4"	5.5"	6.9"
Brightness (NITs)	≥ 11,000	≥ 20,500	≥ 13,000	≥ 8,500
Optimal Viewing Distance	30' - 330'	40' - 660'	60' - 660'	80' - 990'
Color Capability	65,536	281.5 Trillion	281.5 Trillion	281.5 Trillion

## HRP SPECIFICATIONS

MODEL NAME	1248	1632	1732	2040	2345	2545	2848 ~
Pitch	12 mm	16 mm	17 mm	20 mm	23 mm	25 mm	28 mm
Pixel Configuration	1R, 1G, 1B	1R, 1G, 1B 2R, 1G, 1B	2R	2R, 2G, 1B 1R, 1G, 1B	2R, 2G, 1B 1R, 1G, 1B	2R, 2G, 1B	2R, 2G, 1B 4R
Display Unit Size	16 x 16	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8
Control System	Phoenix V09	Phoenix V09	KED Phoenix V09	Phoenix V09	Phoenix V09	Phoenix V09	KED Phoenix V09
Character Height	3.3"	4.4"	4.7"	5.5"	6.3"	6.9"	7.7"
Brightness (NITs)	≥ 9,800	≥ 27,000 ≥ 21,000	≥ 8,000	≥ 20,100 ≥ 10,500	≥ 15,000 ≥ 9,000	≥ 12,900	≥ 10,500 ≥ 6,500
Optimal Viewing Distance	40' - 500'	40' - 660'	55' - 660'	65' - 660'	70' - 850'	80' - 990'	100' - 1150'
Color Capability	281.5 Trillion	281.5 Trillion	65,536	281.5 Trillion	281.5 Trillion	281.5 Trillion	281.5 Trillion 65,536

MODEL NAME	3028	3428	3628	4540	6352	8952-1
Pitch	30 mm	34 mm	36 mm	45 mm	63 mm	89 mm
Pixel Configuration	4R	6R 2R, 2G, 1B 3R, 3G, 2B 4R, 2G	8R	8R, 5G, 3B 4R, 4G, 2B 12R	16R	25R 16R, 8G 10R, 9G, 4B
Display Unit Size	8 x 8	8 x 8	8 x 8	8 x 8	2 x 8	2 x 8
Control System	KED Phoenix V09	KED Phoenix V09	KED Phoenix V09	Phoenix V09	KED Phoenix V09	KED Phoenix V09
Character Height	8.3"	9.4"	10"	12.4"	17.4"	24.5"
Brightness (NITs)	≥ 6,000	≥ 6,500 ≥ 7,500 ≥ 10,500 ≥ 8,200	≥ 7,500	≥ 11,500 ≥ 8,000 ≥ 7,500	≥ 6,000	≥ 5,500 ≥ 6,000 ≥ 6,000
Optimal Viewing Distance	105' - 1150'	120' - 1315'	125' - 1650'	160' - 1650'	225' - 1970'	265'
Color Capability	65,536	65,536 281.5 Trillion 281.5 Trillion 256	65,536	281.5 Trillion 281.5 Trillion 65,536	65,536	65,536 256 281.5 Trillion

# HYOCO PRODUCT SPECS | PCB & IMP

## PCB SPECIFICATIONS

MODEL NAME	1006	1210	1710	1810	2010	2210
Pitch	10 mm	16 mm	17 mm	20 mm	23 mm	25 mm
Pixel Configuration	1R 2R, 1G	1R,	1R	2R, 1G	2R, 1G	1R 2R, 1G
Display Unit Size	16 x 16	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8
Control System	KED	KED	KED Phoenix V09	KED	KED	KED Phoenix V09
Character Height	2.8"	3.3"	4.7"	5"	5.5"	6"
Brightness (NITS)	≥ 5,500	≥ 5,500 ≥ 6,000	≥ 6,500	≥ 6,000	≥ 7,500	≥ 8,300 ≥ 9,000
Optimal Viewing Distance	30' - 330'	40' - 330'	55' - 660'	55' - 660'	65' - 660'	70' - 850'
Color Capability	15	16 256	65,536	256	256	65,536

MODEL NAME	PCB10	PCB16	PCB20	PCB25
Pitch	10 mm	16 mm	20 mm	25 mm
Pixel Configuration	1R	2R, 1G, 1B	2R, 1G, 1B	2R, 1G, 1B
Display Unit Size	16 x 16	8 x 8	8 x 8	8 x 8
Control System	Phoenix V09	Phoenix V09	Phoenix V09	Phoenix V09
Character Height	2.8"	4.4"	5.5"	6.9"
Brightness (NITS)	≥ 14,500	≥ 14,500	≥ 14,500	≥ 14,500
Optimal Viewing Distance	30' - 330'	40 - 330'	65' - 660'	80' - 990'
Color Capability	65,536	281.5 Trillion	281.5 Trillion	281.5 Trillion

## IMP SPECIFICATIONS

MODEL NAME	0503	0603	0803	1003
Pitch	5 mm	6 mm	8 mm	10 mm
Pixel Configuration	1R, 1G, 1B	1R, 1G, 1B	1R, 1G, 1B	1R, 1G, 1B
Display Unit Size	32 x 32	32 x 32	32 x 32	16 x 16
Modular Cabinet Size	128 x 128	128 x 128	64 x 64	64 x 64
Control System	Phoenix V09	Phoenix V09	Phoenix V09	Phoenix V09
Character Height	1.4"	1.6"	2.2"	2.8"
Brightness (NITS)	≥ 5,500	≥ 5,200	≥ 5,000	≥ 5,000
Optimal Viewing Distance	20' - 100'	30' - 165'	35' - 265'	45' - 330'

# HYOCO PRODUCT SPECS | GPC, HPC & T&T

## GPC SPECIFICATIONS

MODEL NAME	GPC12	GPC16	GPC18	GPC24	GPC30	GPC32	GPC36	GPC48
Pixel Diameter	10 mm	16 mm	17 mm	20 mm	23 mm	25 mm	42 mm	52 mm
Pixel Configuration	1R 1G	1R 1G	1R 1G	1R 1G	1R 1G	1R 1G	1R 1G	1R 1G
Cabinet Dimension (inches)	18.2 X 36.8 X 3.0	22.4 X 46.7 X 3.0	25.4 X 52.0 X 3.0	30.3 X 63.6 X 3.0	36.1 X 81.7 X 3.0	38.0 X 96.1 X 7.9	43.3 X 108.3 X 7.9	55.1 X 139.8 X 7.9
Character Height	12"	16"	18"	24"	30"	32"	36"	48"
Brightness (NITS)	≥ 2,000	≥ 2,000	≥ 2,000	≥ 2,000	≥ 2,000	≥ 4,500	≥ 4,500	≥ 4,500
Optimal Viewing Distance	60' - 660'	60' - 660'	60' - 660'	60' - 660'	60' - 660'	160' - 1650'	160' - 1650'	160' - 1650'

## HPC SPECIFICATIONS

MODEL NAME	HPC12	HPC16	HPC18	HPC24	HPC30	HPC32	HPC36	HPC48
Pixel Diameter	10 mm	10 mm	10 mm	10 mm	10 mm	42 mm	42 mm	52 mm
Pixel Configuration	1R 1G	1R 1G	1R 1G	1R 1G	1R 1G	16R 12G	16R 12G	25R 12G
Cabinet Dimension (inches)	18.2 X 34.0 X 3.0	22.4 X 42.7 X 3.0	25.4 X 46.6 X 3.0	30.3 X 58.0 X 3.0	36.1 X 75.3 X 3.0	38.0 X 84.2 X 7.9	43.3 X 95.2 X 7.9	55.1 X 126 X 7.9
Character Height	12"	16"	18"	24"	30"	32"	36"	48"
Brightness (NITS)	≥ 2,000	≥ 2,000	≥ 2,000	≥ 2,000	≥ 2,000	≥ 4,500	≥ 4,500	≥ 4,500
Optimal Viewing Distance	60' - 660'	60' - 660'	60' - 660'	60' - 660'	60' - 660'	160' - 1650'	160' - 1650'	160' - 1650'

## T&T SPECIFICATIONS

MODEL NAME	TT12	TT16	TT18	TT24	TT36	TT48
Pixel Diameter	10 mm	42 mm	52 mm	52 mm	42 mm	52 mm
Pixel Configuration	1R 1G	1R 1G	1R 1G	1R 1G	16R 12G	25R 12G
Cabinet Dimension (inches)	18.2 X 42.7 X 3.0	22.4 X 53.1 X 6.0	25.4 X 58.3 X 6.0	30.3 X 70.5 X 6.0	43.3 X 108.3 X 7.9	55.1 X 139.8 X 7.9
Character Height	12"	16"	18"	24"	36"	48"
Brightness (NITS)	≥ 2,000	≥ 4,500	≥ 4,500	≥ 4,500	≥ 4,500	≥ 4,500
Optimal Viewing Distance	60' - 660'	160' - 1650'	160' - 1650'	160' - 1650'	160' - 1650'	160' - 1650'



*Prominently Displayed*

**HYOCO DISTRIBUTION INC.**

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