

MARINE CLOCK SYSTEM

LOUD&CLEAR

Hanshin provides three types of marine clock system.

HGC-100/100N digital marine clock display UTC(GMT) and LT(local time) with digital type and it can be connected with GPS/DGPS and will be changed the LT(local time) automatically or can be set manually as the location of the vessel. Combined analog slave clock and digital slave clock is available. HSC- MQ1 marine clock display UTC(GMT) and LT(local time) with analog type and it could be set local time manually as the location of the vessel. Analog slave clock only is available.

CE mark(EMC) by DNV GL



HSC-MQ1



HGC-100 / 100N

| System Function & Specification |

DESCRIPTION	HSC-MQ1	HGC-100	HGC-100N
GPS INTERFACE	-	NMEA-0183(IEC61162-1, RS-422, \$-RMC or \$-ZDA) / 4,800bps	
SYSTEM CONFIGURATION	Analog Slave Clock(max. 70ea)	Analog & Digital Slave Clock(max. 100ea)	
CRYSTAL OSCILLATION FREQUENCY	32.768kHz(TCXO)	32.768kHz(TCXO)	
ACCURACY	Within ± 0.15 sec per day	Within ± 0.15 sec per day Synchronizing from GPS automatically	
TEMPERATURE FOR ACCURCY	0°C ~ 40°C	0°C ~ 40°C	
OPERATING TEMPERATURE RANGE	-25°C ~ +70°C	-25°C ~ +70°C	
DISPLAY	Analog	Digital(FND)	
OUTPUT SIGNAL(Analog Slave Clock)			
- FOR 0.5SEC SLAVE CLOCK	DC24V, 0.5sec Polarized Pulse	DC24V, 0.5sec Polarized Pulse	
- FOR 30SEC SLAVE CLOCK	DC24V, 30sec Polarized Pulse	DC24V, 30sec Polarized Pulse	
- TIME SIGNAL FOR ENGINE TELEGRAPH LOGGER	Time signal for engine telegraph logger (ADV/REV)	Time signal for engine telegraph logger (ADV/REV)	-
- SERIAL	-	NMEA-0183(IEC61162-1,RS-422, \$-ZDA)/4,800bps	-
ETHERNET	-	-	- interface :10/100 Mbps RJ45 Ports -Protocols : UDP
POWER CONSUMPTION			
- AC220V	max. 50VA	max. 200VA	
- DC24V	1.6A(max. 50VA)	8.2A(max. 200VA)	
POWER SUPPLY	AC100~220V & DC24V	AC100~220V & DC24V	
MATERIAL	Steel	Steel	
WEIGHT	8.5kg	8kg	
DIMENSION (WxDxH mm)	410 x 80 x 340(Flush/Wall type)	410 x 110 x 340(Flush type), 350 x 110 x 280(Wall type)	

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Digital, IP Type

DESCRIPTION		HDC-210 / 210N	HDC-220 / 220N	HDC-230 / 230N	HDC-240 / 240N	HDC-260 / 260N
DIGITAL CLOCK (2HAND TYPE)						
MOUNTING TYPE		FLUSH	WALL	WALL	BOTH-SIDE	WALL
DIMMER SWITCH		0	0	X	0	X
IP GRADE		IP30	IP30	IP44 / IP56	IP30	IP30
DIMENSION (WxDxH mm)	DIGITAL	165 x 50 x 105	150 x 50 x 105	210 x 52 x 140	210 x 107 x 105	340 x 50 x 160
	IP	165 x 58 x 105	150 x 55 x 105	210 x 54 x 140	210 x 115 x 105	340 x 58 x 160
MATERIAL		STEEL	STEEL	STEEL	STEEL	STEEL







DESCRIPTION		HDC-310 / 310N	HDC-320 / 320N	HDC-330 / 330N	HDC-221 / 221N
DIGITAL CLOCK (3HAND TYPE)					
MOUNTING TYPE		FLUSH	WALL	WALL	WALL
DIMMER SWITCH		X	0	X	0
IP GRADE		IP44 / IP56	IP30	IP44	IP44
DIMENSION (WxDxH mm)	DIGITAL	200 x 39 x 105	180 x 50 x 120	249 x 52 x 140	Ø180 x 50
	IP	209 x 56 x 155	180 x 55 x 120	249 x 57 x 140	Ø180 x 50
MATERIAL		STEEL	STEEL	STEEL	ABS






DESCRIPTION	HCS-DAP	HCS-DD	HCS-DP
DIMMER CONTROLLER			
MOUNTING TYPE	FLUSH	FLUSH	FLUSH
IP GRADE	IP44 / IP56	IP44 / IP56	IP44 / IP56
DIMENSION (WxDxH mm)	80 x 71 x 120	81 x 71 x 120	81 x 71 x 120
MATERIAL	STEEL	STEEL	STEEL
IN USE	Dimmer S/W for Analog Slave Clock	Dimmer S/W for Digital Slave Clock	Dimmer & Sec. Adjust Switch (Backlight) for Analog Slave Clock





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Analog Type

MODEL	HSC-103R	HSC-103S	HSC-104R	HSC-104S	HSC-323	HSC-404
SLAVE CLOCK (2HAND TYPE)						
MOUNTING TYPE	FLUSH	FLUSH	FLUSH	FLUSH	WALL	BOTH-SIDE
E.L PLATE	X	0	X	X	X	X
IP GRADE	IP22	IP22	IP22	IP22	IP22	IP22
DIMENSION (WxDxH mm)	Ø180 x 85	192 x 56 x 192	Ø180 x 85	192 x 56 x 192	Ø420 x 79	260 x 160 x 210
MATERIAL	ABS	STEEL	ABS	STEEL	ABS	ABS

MODEL	HSC-104W	HSC-320	HSC-321	HSC-322	HSC-431
SLAVE CLOCK (2HAND TYPE)					
MOUNTING TYPE	WALL	WALL	WALL	LUXERY, WALL	DECORATIVE, WALL
E.L PLATE	X	X	X	X	X
IP GRADE	IP66	IP22	IP56	IP22	IP22
DIMENSION (WxDxH mm)	323 x 130 x 225	Ø210 x 79	210 x 79 x 244	Ø270 x 48	300 x 45 x 220
MATERIAL	ABS	ABS	ABS	ABS	WOOD

MODEL	HSC-211R	HSC-211S	HSC-212R	HSC-212S
SLAVE CLOCK (3HAND TYPE)				
MOUNTING TYPE	FLUSH	FLUSH	FLUSH	FLUSH
SECOND ADJUST SW	X	0	X	X
E.L PLATE	X	X	X	0
IP GRADE	IP22	IP22	IP22	IP22
DIMENSION (WxDxH mm)	Ø175 x 85	192 x 56 x 192	Ø180 x 85	192 x 56 x 192
MATERIAL	ABS	STEEL	ABS	STEEL

MODEL	HSC-222	HSC-231	HSC-232
SLAVE CLOCK (3HAND TYPE)			
MOUNTING TYPE	LUXERY, WALL	WALL	WALL
SECOND ADJUST SW	X	0	0
E.L PLATE	X	X	0
IP GRADE	IP22	IP22	IP22
DIMENSION	Ø270 x 48	Ø210 x 79	Ø210 x 79
MATERIAL	ABS	ABS	ABS

MODEL	HSC-250R	HSC-250S	HSC-251
3HAND 30SEC SILENCE TIME SLAVE CLOCK			
MOUNTING TYPE	FLUSH	FLUSH	WALL
SILENCE MARK	0	0	0
SECOND ADJUST SW	X	0	0
E.L PLATE	X	X	X
IP GRADE	IP22	IP22	IP22
DIMENSION (WxDxH mm)	Ø180 x 85	192 x 56 x 192	Ø210 x 79
MATERIAL	ABS	STEEL	ABS