

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official pages for procurement and maintenance review

PRODUCT BRAND

GE Vernova

PRODUCT MODEL

IS420UCSCH1A-H-V0.1-A

Mark VIe UCSCH1A controller family reference.
H-V0.1-A configuration details are not established here.



OFFICIAL SOURCE

GE Vernova GEA35665, October 2024, comparison pp. 3-4

Selected reference pages; not complete installation instructions.

AMIKON PRODUCT SUPPORT

+86-18020776786

INFO@AMIKON.CN

AMIKONG.COM

Amikon Limited prepared this independent reference package. Selected manufacturer pages follow with their original content and pagination visible.

Turbine/DCS Control applications

UCSE Version	IS420UCSEH2A	IS420UCSEH2B	IS420UCSCH1A/B	IS420UCSCH2A
				
Processor	Intel i7 1186-GRE	Intel i7 1186-GRE	AMD GX-412HC GE412GHCJ44JB	AMD GX-216HC GE216HHBJ23JB
CPU Frequency	2.8 Ghz	1.2 Ghz	1.2 Ghz	1.6 Ghz
CPU Cores	4	2	4	2
Mark VIe Cores	2	2	2	2
L2 Cache	12 M	12 M	2 M	2 M
Qnx Version	7.1	7.1	6.5 or 7.1	6.5 or 7.1
Profinet	Yes	No	Yes	No
Ethernet Ports Total	8	8	6	6
Ethernet Ports 100 MB	8	8	6	6
Console	Integrated USB-C to Serial	Integrated USB-C to Serial	RJ-45 (Adaptor sold separately)	RJ-45 (Adaptor sold separately)
Additional Ports	USB 3.2 Gen 2 - USB-C	USB 3.2 Gen 2 - USB-C	USB2.0 ×2	USB2.0 ×2
Power input - Non redundant	2 - Front, Bottom*	2 - Front, Bottom*	1 - Bottom	1 - Bottom
Orientation Capability	Vertical	Rotate 180* for UCSB Compatibility	Vertical	Vertical
Max Power Consumption	60 W	36 W	31 W	31 W
Minimum Voltage	18 V	18 V	18 V	18 V
Nominal Voltage	24/28/48 V	24/28/48 V	24/28 V	24/28 V
Maximum Voltage	50 V	50 V	30 V	30 V
Memory Type	DDR4-3200	DDR4-3200	DDR3 - 1333	DDR3-1066
Memory Size	8 GB	8 GB	4 GB	2 GB
ECC Memory	Yes - Inband	Yes - Inband	Yes	Yes
Flash Storage	80 GB SSD pSLC (18 GB used)	80 GB SSD pSLC (18 GB used)	40 GB SSD pSLC (16 GB used)	40 GB SSD pSLC (16 GB used)
NVRAM Capabilities	6139 non-volatile program variables, 338 forces, and 128 totalizers		ControlST V07.05 and higher supports 6139 non-volatile program variables, 338 forces, and 128 totalizers	
Chassis Dimensions				
Dimensions - Width	85 mm	56 mm	55 mm	55 mm
Dimensions - Depth (Excluding mounting bracket)	170 mm	170 mm	150 mm	150 mm
Dimensions - Height (Excluding mounting bracket)	166 mm	166 mm	168 mm	168 mm
Mounting Bracket Dimensions				
Width	85 mm	56 mm	42 mm	42 mm
Height	204 mm	204 mm	204 mm	204 mm
Thickness	3.2 mm	1.6 mm	2 mm	2 mm

UCSE Version	IS420UCSEH2A	IS420UCSEH2B	IS420UCSCH1A/B	IS420UCSCH2A
				
Operating Temperature				
Min	-40°C	-40°C	-40°C	-40°C
Max	-	+58°C	+70°C	+70°C
Max with 0.5 m/s airflow	+65°C	-	-	-
Storage Temp				
Min	-40°C	-40°C	-40°C	-40°C
Max	+85°C	+85°C	+85°C	+85°C
Altitude	1000 m Nominal	1000 m Nominal	1000 m Nominal	1000 m Nominal
Cooling	Vertical Airflow > 0.5 m/s	Convection	Convection	Convection
Reverse Polarity Protection	Yes 50 V	Yes 50 V	Provided	Provided
Weight	2650 g (93.5 oz)	1585 g (56.0 oz)	1,327 g (46.8 oz)	1,327 g (46.8 oz)
Surge Protection	Non Replaceable SLOW BLOW 8A 63 VAC	Non Replaceable SLOW BLOW 8A 63 VAC	Non-replaceable 4 A 125 V dc rated fuse; Nominal melting: 26 A squared seconds (A2 sec)	
Humidity	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing