

Technical Paper

Zigbee Cluster Specification - *Danfoss Ally™* Room Sensor

This ZigBee cluster specification is based of the ZigBee cluster library specification.

If nothing explicit is mentioned below the commands, clusters and attributes are implemented as per ZigBee Specification

Revision history:

Release Date	Changes and New Features
15-08-2022	First version based on PICS information

1. Commands:

Profile (0x0104) Home Automation/ DeviceID (0x0301) Thermostat

Product Filter		Command ID	Command Name	M/O	Direction	Description
#001	General	General command frames				
#002	General	0x00	Read Attributes	M	client->server	
#003	General	0x02	Write Attributes	M	client->server	A write to a standard attribute, where another attribute defines it range. Writing outside this range will result in INVALID_VALUEA write to a standard attribute, with restricted values. Writing to the restricted values will result in INVALID_VALUE.If the device cannot support the supplied value, the status field of the corresponding write attribute status record SHALL be set to INVALID_VALUE
#004	General	0x06	Configure Reporting	O	client->server	
#005	General	0x08	Read Reporting Configuration	O	client->server	
#006	General	0x0A	Report Attributes	O	server->client	
#006	General	0x0C	Discover Attributes	O	client->server	
#007	0x0000	Basic Cluster (0x0000)				
#0010	0x0000	0x00	Reset to factory defaults	O	server->client	
#011	0x0001	Power Configuration Cluster (0x0001)				
#0012	0x0001	-> no commands are received or generated				
#013	0x0003	Identify Cluster (0x0003)				
#014	0x0003	0x00	Identify	M	client->server	
#015	0x0003	0x01	Identify Query	M	client->server	
#016	0x0003	0x00	Identify Time Query Response	M	server->client	
#017	0x000A	Time Server Cluster (0x000A)				
#018	0x000A	-> no commands are received or generated				

Cont.

Product Filter		Command ID	Command Name	M/O	Direction	Description
#019	0x0019	OTA Update Cluster (0x0019)				
#020	0x0019	0x00	Image Notify	M	server->client	
#021	0x0019	0x01	Query Next Image Request	M	client->server	
#022	0x0019	0x02	Query Next Image Response	M	server->client	
#023	0x0019	0x03	Image Block Request	M	client->server	
#024	0x0019	0x05	Image Block Response	M	server->client	
#025	0x0019	0x06	Upgrade End Request	M	client->server	
#026	0x0019	0x07	Upgrade End Response	M	server->client	
#047	0x0402	Temperature Measurement (0x0402)				
#048	0x0402	-> no commands are received or generated				
#049	0x0405	Relative Humidity (0x0405)				
#050	0x0405	-> no commands are received or generated				

2. Profile (0x0104) Home Automation / DeviceID (0x0302)

Product Filter	Cluster	Attribute ID	Name	Data Type	R/W	M/O	Range Min	Range Max	Report- ing	Save	Def.Min Interval	Def. Max Interval	Report. Change	Default	Description
#001	0x0000	Cluster:	(0x0000) Basic												
#002	0x0000	0x0000	ZCL Version	unit8	R	M	0x00	0xFF	No	No	1	65534	0	0x03	03= "Battery"
#003	0x0000	0x0007	Power Source	enum8	R	M								0xFF	
#004	0x0000	0x0009	GenericDevice-Type	enum8	R	O	0x00	0xFF						empty string	
#005	0x0000	0x000A	ProductCode	octstr	R	O								empty string	
#006	0x0000	0x000B	ProductURL	string	R	O								empty string	
#007	0x0000	0x0010	LocationDescription	string	RW	O	0 bytes	16 bytes						empty string	
#008	0x0000	0x0011	PhysicalEnvironment	enum8	RW	O	0x00	0xFF						0x00	
#009	0x0000	0x0012	DeviceEnabled	bool	RW	O	0x00	0x01						0x01	
#010	0x0000	0x0013	AlarmMask	map8	RW	O	00000xx							0x00	
#011	0x0000	0x0014	DisableLocalConfig	map8	RW	O	00000xx							0x00	
#012	0x0000	0x4000	SWBuildID	string	R	O	0 bytes	16 bytes						empty string	
#013	0x0000	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	
#014	0x0001	Cluster:	(0x0001) Power Configuration												
#015	0x0001	0x0020	BatteryVoltage	unit8	R	O	0x00	0xFF							
#016	0x0001	0x0021	BatteryPercentageRe- maining	unit8	R	O	0X00	0XFF						0x00	
#017	0x0001	0xFFFD	Cluster revision						No	No	1	65534	0	0x0001	
#018	0x0003	Cluster:	(0x0003) Identity												
#019	0x0003	0x0000	Identity Time	unit16	RW	M	0x0000	0xFFFF						0x0000	
#020	0x0003	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	
#021	0x000A	Cluster:	(0x000A) Time												
#021	0x000A	0x0000	Time	UTC	RW	M	0x00000000	0xFFFFFFFF						0xFFFFFFFF	
#022	0x000A	0x0001	TimeStatus	map8	RW	M								0b00000000	
#026	0x000A	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	
#027	0x0019	Cluster:	(0x0019) OTA Upgrade												
#028	0x0019	0x0000	UpgradeServerID	EU164	R	M								0xffffffffffff	
#029	0x0019	0x0001	FileOffset	unit32	R	O								0xFFFFFFFF	
#034	0x0019	0x0006	ImageUpgradeStatus	enum8	R	M								0x00	
#051	0x0019	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	

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Product Filter	Cluster ID	Attribute ID	Name	Data Type	R/W	M/O	Range Min	Range Max	Report- ing	Save	Def.Min Interval	Def. Max Interval	Report. Change	Default	Description
#052	0x0402	Cluster:	(0x0402) Temperature Measurement												
#053	0x0402	0x0000	MeasuredValue	unit16	R	M	MinMeasuredValue	MaxMeasuredValue						0xffff	
#054	0x0402	0x0001	MinMeasuredValue	unit16	R	M	0x954d	0x7ffe						0x8000	
#055	0x0402	0x0002	MaxMeasuredValue	unit16	R	M	0x954e	0x7ff						0x8000	
#056	0x0402	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	
#057	0x0405	Cluster:	(0x0405) Relative Humidity Measur.												
#058	0x0405	0x0000	MeasuredValue	unit16	R	M	MinMeasuredValue	MaxMeasuredValue						0xffff	
#059	0x0405	0x0001	MinMeasuredValue	unit16	R	M	0x0000	0x270f						0xffff	
#060	0x0405	0x0002	MaxMeasuredValue	unit16	R	M	0x0000	0x2710						0xffff	
#061	0x0405	0xFFFD	Cluster revision	unit16					No	No	1	65534	0	0x0001	

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