

#### **EnOcean Equipment Profiles**

#### **REVISION HISTORY**

Ver.	Editor	Change	Date
2.6.8	NM	Last xml edition of the EEP-Specification	Dec 31, 2017

Copyright © EnOcean Alliance Inc. (2019). All rights reserved.

The information within this document is the property of the EnOcean Alliance and its use and disclosure are restricted. Elements of the EnOcean Alliance specifications may also be subject to third party intellectual property rights, including without limitation, patent, copyright or trademark rights (such a third party may or may not be a member of the EnOcean Alliance.)

The EnOcean Alliance is not responsible and shall not be held responsible in any manner for identifying or failing to identify any or all such third party intellectual property rights. This document and the information contained herein are provided on an "as is" basis and the EnOcean Alliance disclaims all warranties express or implied, including but not limited to

- (1) any warranty that the use of the information herein will not infringe any rights of third parties (including any intellectual property rights, patent, copyright or trademark rights, or
- (2) any implied warranties of merchantability, fitness for a particular purpose, title or non-infringement.

In no event will the EnOcean Alliance be liable for any loss of profits, loss of business, loss of use of data, interruption of business, or for any other direct, indirect, special or exemplary, incidental, punitive or consequential damages of any kind, in contract or in tort, in connection with this document or the information contained herein, even if advised of the possibility of such loss or damage. All Company, brand and product names may be trademarks that are the sole property of their respective owners.

The above notice and this paragraph must be included on all copies of this document that are made.

The EnOcean Alliance "EnOcean Equipment Profiles definitions" are available free of charge to companies, individuals and institutions for all non-commercial purposes (including educational research, technical evaluation and development of non-commercial tools or documentation.)

This specification includes intellectual property ("IPR") of the EnOcean Alliance and joint intellectual properties ("joint IPR") with contributing member companies. No part of this

EnOcean Equipment Profiles Page 1/7

# enocean alliance No Wires. No Batteries. No Limits.

### **System Specification**

specification may be used in development of a product or service for sale without being a participant or promoter member of the EnOcean Alliance and/or joint owner of the appropriate joint IPR.

These errata may not have been subjected to an Intellectual Property review, and as such, may contain undeclared Necessary Claims.

EnOcean Alliance Inc. 2400 Camino Ramon, Suite 375 San Ramon, CA 94583 USA Graham Martin Chairman & CEO EnOcean Alliance

EnOcean Equipment Profiles



### **A5-20: HVAC Components**

RORG	A5	4BS Telegram
FUNC	20	HVAC Components
TYPE	10	Generic HVAC Interface (BI-DIR)

#### Submitter: Intesis Software SL

Functions: Mode, Vane Position, Fan Speed, Sensors and On/Off: With this EEP plus the already existing EEP A5-10-03 and A5-20-11 all the information of AC indoor unit can be sent and received allowing a much easier and complete control of these units.

DIRECTION-1 = Receive mode: Commands received by the HVAC interface. DIRECTION-2 = Transmit mode: Commands sent by the HVAC interface.

#### DIRECTION-1

Offset	Size	Bitrange	Data	ShortCut	Description	Valid R	tange	Scale	Unit
	8	DB3.7DB3.0			The modes are the same as in KNX and LON allowing a more transparent integration with this protocols and it	Enum: 0:	Auto		
					has plenty of free positions for future expansion	1:	Heat		
					2:	Morni	ng Warn	nup	
						3:	Cool		
						4:	Night	Purge	
						5:	Preco	ol	
						6:	Off		
						7:	Test		
						8:	Emer	gency H	eat
						9:	Fan o	nly	
						10:	Free	cool	
						11:	Ice		

EnOcean Equipment Profiles Page 3/7



							12:	Max heat
							13:	Economic heat/cool
							14:	Dehumidification (dry)
							15:	Calibration
							16:	Emergency cool
							17:	Emergency steam
							18:	max cool
							19:	Hvc load
							20:	no load
						21	130:	reserved
							31:	Auto Heat
							32:	Auto Cool
						33	3254	reserved
						_	255:	N/A
ſ								
	8	4	DB2.7DB2.4	Vane	VPS	Er	num:	
	8	4	DB2.7DB2.4	Vane position	VPS		num: 0:	Auto
	8	4	DB2.7DB2.4		VPS		0:	Auto Horizontal
	8	4	DB2.7DB2.4		VPS		0:	
	8	4	DB2.7DB2.4		VPS		0: 1: 2:	Horizontal
	8	4	DB2.7DB2.4		VPS		0: 1: 2: 3:	Horizontal Pos2
	8	4	DB2.7DB2.4		VPS		0: 1: 2: 3: 4:	Horizontal Pos2 Pos3
	8	4	DB2.7DB2.4		VPS		0: 1: 2: 3: 4: 5:	Horizontal Pos2 Pos3 Pos4
	8	4	DB2.7DB2.4		VPS		0: 1: 2: 3: 4: 5: 6:	Horizontal  Pos2  Pos3  Pos4  Vertical  Swing  Reserved
	8	4	DB2.7DB2.4		VPS	7.	0: 1: 2: 3: 4: 5: 6: 10:	Horizontal  Pos2  Pos3  Pos4  Vertical  Swing  Reserved  Vertical swing
	8	4	DB2.7DB2.4		VPS	7.	0: 1: 2: 3: 4: 5: 6: 10: 11:	Horizontal  Pos2  Pos3  Pos4  Vertical  Swing  Reserved  Vertical swing  Horizontal swing
	8	4	DB2.7DB2.4		VPS	7.	0: 1: 2: 3: 4: 5: 6: 11: 12:	Horizontal  Pos2  Pos3  Pos4  Vertical  Swing  Reserved  Vertical swing  Horizontal swing  Horizontal and vertical swing
	8	4	DB2.7DB2.4		VPS	7.	0: 1: 2: 3: 4: 5: 6: 11: 12:	Horizontal  Pos2  Pos3  Pos4  Vertical  Swing  Reserved  Vertical swing  Horizontal swing  Horizontal and

EnOcean Equipment Profiles Page 4/7



12	4	DB2.3DB2.0	Fan Speed	FANSP	fan speed value goes from 1 to 14. 1 is the lowest fan speed allowed by the AC and from there it increments with the value of this variable. Typically AC units have up to 5-6 speeds. Any speed higher than the maximum the AC allows would set it to the higher speed. 0 is auto and 15 is N/A	0: 114	Auto Up to 1	.4 fan being 1 t	the
16	8	DB1.7DB1.0	Control variable	CVAR	Control variable; value 255 = auto	010	0, 255	0100	%
24	4	DB0.7DB0.4	Not Used (	= 0)					
28	1	DB0.3	LRN Bit	LRNB	LRN Bit	Enum: 0: 1:		telegran	n
29	2	DB0.2DB0.1	Room occupancy	RO	The interfaces can automatically control the behaviour of the AC without integration in automation systems when linked to presence/movement sensors.	1: 2: 3:	Occupie StandBy perform Unoccup perform	d (waiting action) bied (action) occupance	on
31	1	DB0.0	On/Off	O/I	On/Off	0: 1:		unit is no )	t

EnOcean Equipment Profiles Page 5/7



DIRECTION-2

Offset			Data	ShortCut	Description	Valid Ra	nnge Scale Unit
0	8	DB3.7DB3.0			The modes are the same as in KNX	Enum:	
					and LON allowing a more transparent integration with this protocols and it	0:	Auto
					has plenty of free positions for future expansion	1:	Heat
						2:	Morning Warmup
						3:	Cool
						4:	Night Purge
						5:	Precool
						6:	Off
						7:	Test
						8:	Emergency Heat
						9:	Fan only
						10:	Free cool
						11:	Ice
						12:	Max heat
						13:	Economic heat/cool
						14:	Dehumidification (dry)
						15:	Calibration
						16:	Emergency cool
						17:	Emergency steam
					18:	max cool	
						19:	Hvc load
						20:	no load
						2130:	reserved
						31:	Auto Heat
						32:	Auto Cool
						33254:	reserved
						255:	N/A

EnOcean Equipment Profiles Page 6/7



8	4	DB2.7DB2.4	Vano	VPS			
8	4	DB2.7DB2.4	position	VPS		Enum:	4
			position			0:	Auto
						1:	Horizontal
						2:	Pos2
						3:	Pos3
						4:	Pos4
						5:	Vertical
						6:	Swing
						710:	Reserved
						11:	Vertical swing
						12:	Horizontal swing
						13:	Horizontal and vertical swing
						14:	Stop swing
						15:	N/A
12	4	DB2.3DB2.0	Fan Speed	FANSP	fan speed value goes from 1 to 14. 1	Enum:	
					is the lowest fan speed allowed by the AC and from there it increments	0:	Auto
					with the value of this variable. Typically AC units have up to 5-6		Up to 14 fan speeds
					speeds. Any speed higher than the	114:	being 1 the lowest
					maximum the AC allows would set it to the higher speed. 0 is auto and 15 is N/A	15.	N/A
16	8	DB1.7DB1.0	Control variable	CVAR	Control variable (linear); value 255 = auto	0100	, 255 0100 %
24	4	DB0.7DB0.4	Not Used (	= 0)			
28	1	DB0.3	LRN Bit	LRNB	LRN Bit	Enum:	
							Teach-in telegram
			_		_		Data telegram
29	2	DB0.2DB0.1		RO	Room occupancy	Enum:	Occupied
			occupancy			0:	Occupied
							StandBy (waiting to perform action)
							Unoccupied (action performed)
						3:	Off (no occupancy and no action)
31	1	DB0.0	On/Off	O/I	On/Off	Enum:	,
						0:	off
						1:	on

EnOcean Equipment Profiles Page 7/7