No Wires. No Batteries. No Limits.

D2 : VLD Telegram

D2 - 14 : Multi Function Sensors

Submitter: Echoflex Solutions

Description
Indoor Smarthome Multisensor

Data exchange
Direction: unidirectional.

EEP Family Table
Each TYPE has to support all telegrams and parameters marked in its column.

Parameters Overview	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
humidity	X	X	-	X	X	X	-	X	X	X	X	X	-	X	X	X
ButtonAI	-	X	-	-	-	-	-	-	-	-	-	-	-	X	X	-
ButtonBI	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voc	-	-	X	X	-	X	-	-	-	X	X	X	-	X	X	-
Illumination	-	-	-	-	X	X	-	-	X	-	X	-	-	-	-	-
Co2	-	-	-	-	-	-	X	X	X	X	X	-	X	-	X	-
Barometer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
temperature	X	X	-	X	X	X	-	X	X	X	X	X	-	X	X	X
Button A	-	X	-	-	-	-	-	-	-	-	-	-	-	X	X	-
Button B	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TVOC	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Presence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
battery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ColorTemperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke Alarm status	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sensor fault mode status	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke Alarm Condition analysis: Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke Alarm Condition analysis: Humidity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke Alarm Condition analysis: Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time since last maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining Product Life Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hygrothermal Comfort Index	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T/Hum. Indoor Air Analysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO Alarm status	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO Alarm Condition analysis: Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO Alarm Condition analysis: Humidity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO Alarm Condition analysis: Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO Indoor Air Analysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceleration X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceleration Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceleration Z	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceleration Status	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
contact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Past Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RMS Current	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Factor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Real Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameters Overview	10	1A	1B	1C	1D	20	21	22	23	24	25	30	31	40	41	50
humidity	X	X	X	X	X	X	-	X	-	-	-	X	X	X	X	-
ButtonAl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ButtonBl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voc	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illumination	-	-	X	-	X	X	-	-	X	X	X	-	-	X	X	-
Co2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barometer	-	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-
Occupancy	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy	-	X	X	X	X	X	X	X	X	X	-	-	-	-	-	-
temperature	X	X	X	X	X	X	X	X	X	-	-	X	X	X	X	X
Button A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Button B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TVOC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Presence	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
battery	-	X	X	X	X	X	X	X	X	X	-	X	X	-	-	-
ColorTemperature	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
Smoke Alarm status	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Sensor fault mode status	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
Smoke Alarm Condition analysis: Maintenance	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Smoke Alarm Condition analysis: Humidity	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Smoke Alarm Condition analysis: Temperature	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Time since last maintenance	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
Remaining Product Life Time	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
Hygrothermal Comfort Index	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
T/Hum. Indoor Air Analysis	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
CO Alarm status	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CO Alarm Condition analysis: Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CO Alarm Condition analysis: Humidity	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CO Alarm Condition analysis: Temperature	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CO Indoor Air Analysis	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
PH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
Dissolved Oxygen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acceleration X	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-
Acceleration Y	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-
Acceleration Z	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-
Acceleration Status	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-
contact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Past Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RMS Current	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power Factor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Real Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameters Overview	51	52	53	55
humidity	-	-	X	-
ButtonAl	-	-	-	-
ButtonBl	-	-	-	-
Voc	-	-	-	-
Illumination	-	-	-	-
Co2	-	-	-	-
Barometer	-	-	-	-
Occupancy	-	-	-	-
Energy	-	-	-	-
temperature	X	-	X	-

Button A	-	-	-	-
Button B	-	-	-	-
TVOC	-	-	-	-
Presence	-	-	-	-
battery	-	-	-	-
ColorTemperature	-	-	-	-
Smoke Alarm status	-	-	-	-
Sensor fault mode status	-	-	-	-
Smoke Alarm Condition analysis: Maintenance	-	-	-	-
Smoke Alarm Condition analysis: Humidity	-	-	-	-
Smoke Alarm Condition analysis: Temperature	-	-	-	-
Time since last maintenance	-	-	-	-
Remaining Product Life Time	-	-	-	-
Hygrothermal Comfort Index	-	-	-	-
T/Hum. Indoor Air Analysis	-	-	-	-
CO Alarm status	-	-	-	-
CO Alarm Condition analysis: Maintenance	-	-	-	-
CO Alarm Condition analysis: Humidity	-	-	-	-
CO Alarm Condition analysis: Temperature	-	-	-	-
CO	-	-	-	-
CO Indoor Air Analysis	-	-	-	-
PH	-	-	-	-
Dissolved Oxygen	X	-	-	-
Acceleration X	-	-	-	-
Acceleration Y	-	-	-	-
Acceleration Z	-	-	-	-
Acceleration Status	-	-	-	-
contact	-	-	-	-
Leak Detection	-	X	X	-
Past Leak Detection	-	X	X	-
RMS Current	-	-	-	X
Power Factor	-	-	-	X
Real Power	-	-	-	X

RORG	D2	**VLD Telegram**
FUNC	14	Multi Function Sensors
TYPE	55	Power Use Monitor

Description
This EEP reports RMS current, real power, and power factor. .

Data exchange
Direction: to.
Addressing: broadcast.
Communication trigger: time_trigger.
Trigger description: .
Timing description:

Offset	Size	Data	Description	Valid Range		Scale	Unit	Trigger
0	16	RMS Current	Instantaneous RMS current	Enum:				
				0 ... 65534 :	0 ... 65534		mA	
				65535 :	Error			
16	8	Power Factor	Instantaneous power factor	Enum:				
				0 ... 200 :	0 ... 100		%	

				201 ... 254 : Reserved	
				255 : Error	
24	16	Real Power	Instantaneous real power	Enum:	
				0 ... 65534 : 0 ... 65534 W	
				65535 : Error	