

## 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Past Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameters Overview	10	1A	1B	1C	1D	20	21	22	23	24	25	30	31	40	50	51	53	54
humidity	X	X	X	X	X	X	-	X	-	-	-	X	X	X	-	-	-	X
ButtonAI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ButtonBI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voc	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illumination	-	-	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	-	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-
Acceleration X	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Acceleration Y	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Acceleration Z	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Acceleration Status	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X
Past Leak Detection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X

RORG	D2	<b>VLD Telegram</b>
FUNC	14	Multi Function Sensors
TYPE	53	Leak Detector

## Description

A sensor that measures indicates whether a leak is currently detected, as well as whether a leak has been detected since last time the "Past Leak Detection Status" field was reset. Resetting the "Past Leak Detection" is accomplished by a button press or other method not covered by this EEP. .

## Data exchange

Direction: from.

Addressing: broadcast.

Communication trigger: event\_time\_trigger.

Trigger description: Transmit on change of Leak Detection state and periodically..

Timing description: Periodically with a maximum period of 1000 seconds.

Offset	Size	Data	Description	Valid Range	Scale	Unit	Trigger
0	2	Leak Detection	Indicates whether a leak is currently detected	Enum: 0 : No leak detected 1 : Leak detected 2 : Leak sensor error			X
2	1	Past Leak Detection	Indicates whether a leak has been detected since last time this field was reset	Enum: 0 : No leak detected 1 : Leak detected			
3	5	Not Used (= 0)					

RORG	D2	<b>VLD Telegram</b>
FUNC	14	Multi Function Sensors
TYPE	54	Leak Detector with Temperature and Humidity Sensing

## Description

A sensor that measures indicates whether a leak is currently detected, as well as whether a leak has been detected since last time the "Past Leak Detection Status" field was reset. Resetting the "Past Leak Detection" is accomplished by a button press or other method not covered by this EEP. This sensor also reports temperature and relative humidity. .

## Data exchange

Direction: from.

Addressing: broadcast.

Communication trigger: event\_time\_trigger.

Trigger description: Transmit on change of Leak Detection state and periodically..

Timing description: Periodically with a maximum period of 1000 seconds.

Offset	Size	Data	Description	Valid Range	Scale	Unit	Trigger
0	2	Leak Detection	Indicates whether a leak is currently detected	Enum: 0 : No leak detected 1 : Leak detected 2 : Leak sensor error			X
2	1	Past Leak Detection	Indicates whether a leak has been detected since last time this field was reset	Enum: 0 : No leak detected 1 : Leak detected			
3	9	temperature	Measurement of Temperature in linear	Enum: 0 ... 500 : 0 ... 50 °C 511 : Error			
12	8	humidity	Rel. Humidity linear)	Enum: 0 ... 200 : 0 ... 100 % 254 : Supported + Invalid 255 : notSupported			
20	4	Not Used (= 0)					