
Version 1.0
July 1999
Rain Sensor : 1051



LONMARK® Functional Profile: Rain Sensor

Overview

This document describes the profile for a rain sensor object. This profile is used for devices that can detect the presence of rain.

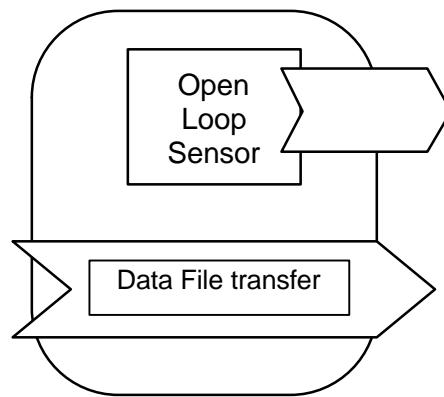


Figure 1 Rain Sensor Object Functional Profile

Example Usage

Typically the output of this rain sensor is connected to controllers integrated in a sunblind management system.

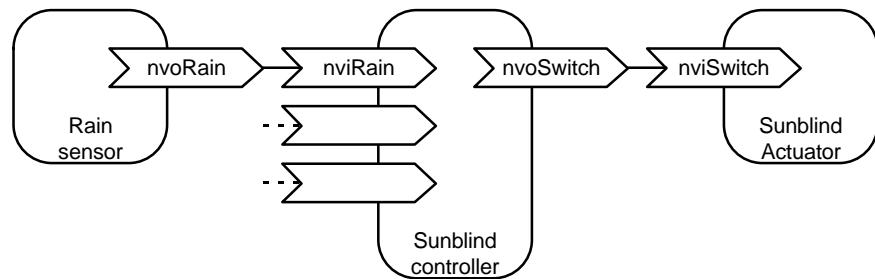


Figure 2 Example usage of a Rain Sensor Object

Object details

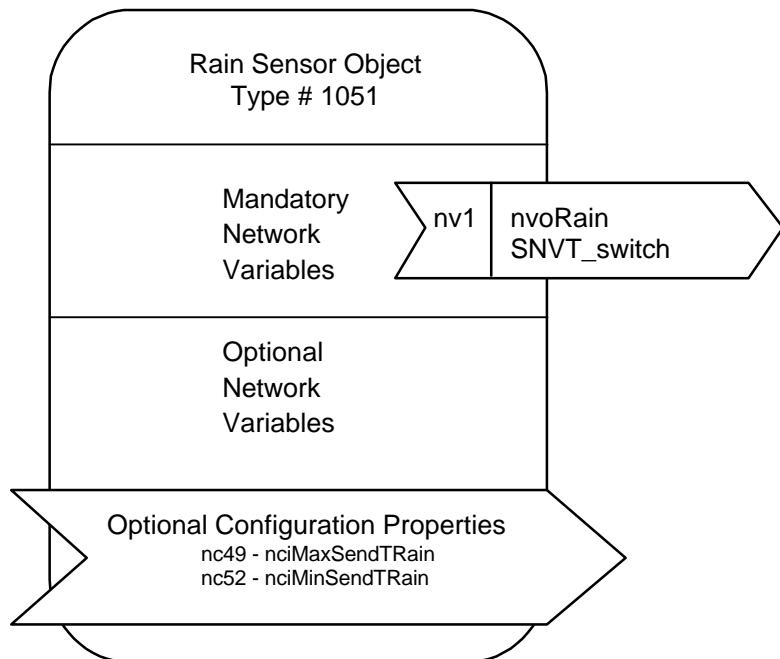


Figure 3 Object details

Table 1 SNVT Details

NV # (M/O)*	Name	In/Out	SNVT Type (SNVT Index)	Class	Description
1 (M)	nvoRain	Out	SNVT_switch (95)	I/O	Presence or absence of rain
nc49 (M)	nci MaxSend TRain	-	SNVT_time_sec (107)	config	Send Heartbeat SCPTmaxSendTime
nc52 (M)	nci MinSend TRain	-	SNVT_time_sec (107)	config	Minimum Send Time (Send Throttle) SCPTminSendTime

* M = mandatory, O = optional

Table 2 SCPT Details

SCPT Index (M/O)*	Name	Association **	Description
nci49 (O)	SCPTmaxSendTime nciMaxSendTRain SNVT_time_sec (107)	nv1 (M)	maximum period of time that expires before the Rain Sensor object will automatically update NV
nci52 (O)	SCPTminSendTime nciMinSendTRain SNVT_time_sec (107)	nv1 (M)	minimum period of time that expires before the Rain Sensor object will automatically update NV

* M = mandatory, O = optional

** List of NVs to which this configuration property applies. NV index = 0 means configuration property applies to the object as a whole (nv0).

Mandatory Network Variables

Rain Data

```
network output SNVT_switch nvoRain;
```

This output network variable provides the state of the rain detector.

Valid Range

value field	state field	meaning
0%	0	no rain
100%	1	rain

All other values in the 2 fields are considered as undefined detection.

When Transmitted

Whenever hardware state changes.

Update Rate

Defined by configuration parameters.

Default Service Type

Defined by manufacturer.

Configuration Properties

Rain Max Send Time

```
network input config SNVT_time_sec nciMaxSendTRain;
```

This input configuration network variable is used to control the maximum period that expires before the object automatically transmits the current value of the nvoRain output network variable.

Valid Range

0 - 6553.4 s

Default Value

Defined by the manufacturer.

SCPT Reference

SCPTmaxSendTime #49.

Rain Min Send Time

```
network input config SNVT_time_sec nciMinSendTRain;
```

This input configuration network variable is used to control the minimum period between output network variable transmissions (maximum transmission rate).

Valid Range

0 - 6553.4 s

Default Value

Defined by the manufacturer.

SCPT Reference

SCPTminSendTime #52.

Power-up State

None specified.

Boundary and Error Conditions

None.

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