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Newsteo DIS range Product Specification

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Revisions

Revision	Issue Date	Author	Comments
0.1	January 6 th , 2016	AC	
1.1	February 25 th , 2016	AC	Modification in the number of supported devices LGR37 & LGR33 added in the list of the supported devices Multi-sensor, one logger per screen Modification of the display Antenna modification on DIS30
1.2	December 8 th , 2016	AC	DIS31 : no power supply, Creation of 2 accessories for DIS31 supplying Update of the pictures Update of the sound alarm functioning

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1 Introduction

Preliminary specification – Subjected to change without prior notification.

TBC : To be confirmed

TBD : To be defined


NA: Not applicable

Object:

Define the products specifications in term of technical characteristics, physical dimensions, aperture, accessories and casing.

Products:

DIS : Range of products which aim is to display the last measurement of one or several Newsteo Logger.

	Reference	Description
	PFPN-DIS30-001	Universal wireless display device for indoor use
	PFPN-DIS31-001	Universal wireless display device for use inside a vehicle

2 Summary of the product functioning

The DIS3x is a Newsteo accessory used to display the last measurement and / or the alerts of loggers. It is manually paired to one or several loggers.

The DIS3x is not a receiving station: it does not store the measurements. It is just used as a display.

3 Newsteo DIS

3.1 Functioning

3.1.1 Starting

Both DIS3x and loggers need to be paired together. To display the measurement of a logger, the DIS3x has to be paired with it.

Process:

1. Power ON the DIS3x,
2. Wait the product to be booted
3. Press the button during 3 seconds
4. The DIS3x starts bipping, it is in pairing mode. The word "PAIRING IN PROGRESS" is displayed on the screen
5. The user swipes a magnet on the logger (on the magnet area)
6. The DIS3x detects the logger and pair it. On the display, the measurement and the "description" field of the logger are displayed. The DIS3x automatically exits pairing procedure and is operating.
7. If the user needs to pair another logger, he has to restart the procedure (starting from point 3).

To remove a logger from the list of paired loggers, the user has to clear the whole list. To do this,

1. Remove the main power from the DIS3x
2. Press the button
3. Keep the button pressed and power on the product
4. The DIS3x bipps and displays "LIST CLEARED"

The user can pair up to 20 loggers.

3.1.2 Displaying

The DIS3x displays the last received measurement of each logger it has been paired to. It displays the value of the 3 first sensors of the logger.

The DIS3x displays one logger per screen. It changes automatically the screen (it stays few seconds on each page). The user can also press the button to immediately change the displayed logger.

The DIS3x does not manage the measurements received as debufferisation or restitution packets (there are not displayed and they do not create alerts).

3.1.2.1 No alert

The DIS3x displays the following data:

		N	A	M	E	O	F	L	O	G	0	2	2	2	2				
	T	E	M	P	E	R	A	T	U	R	E		+	9	9	.	9	°	C
	H	U	M	I	D	I	T	Y						3	3	.	1	%	
	D	E	W		P	O	I	N	T				+	7	9	.	9	°	C

- First line indicates the name of the device : 14 first characters of the “description” field of the logger
- Lines 2,3,4 give the measurement of each sensor of the logger
 - o 1 character used if there is an alarm on the sensor (character “>” displayed)
 - o 11 characters are used to give the sensor name
 - o 1 space
 - o The measurement
 - o Its unit (2 characters)

Note: if the measurement exceeds 100, then the digit corresponding to the decimals is not displayed.

3.1.2.2 Alert

When an alert occurs, only the loggers which are in alert are displayed.

The logger are displayed one by one, the DIS automatically displays all the alerts.

3.1.2.2.1 Acknowledgment

The user has to acknowledge the alert by pressing the button. When he presses the button, a confirmation screen is displayed, he has to validate that he wants to acknowledge the alert of the selected logger. If several loggers are in alert, he needs to acknowledge the alarm for each one.

The alert acknowledgement is sent by radio to the receiving station (RF Monitor, collector) to be stored as an event in the data base.

3.1.2.2.2 Buzzer

When an alert occurs, the buzzer rings.

To deactivate the alarm sound, the user has to press 2 times the button.

After this acknowledgment, a message appears "Keep alert sound every hour?"

- If the user presses the button, the DIS will ring every hour, if at least one wireless logger is still on alert
- If the user doesn't press the button, the alarm sound is deactivated.

3.1.2.2.3 Screen

When a Logger is alert, the first line of the display (corresponding to the name of the product) is framed by two special characters: *.

3 kinds of alerts can be displayed:

- Measurement outside of the thresholds

*		N	A	M	E	O	F	L	O	G	G	E	R	3	4	5	6		*
>	T	E	M	P	E	R	A	T	U	R	E		+	9	9	.	9	°	C
	H	U	M	I	D	I	T	Y						3	3	.	1	%	
	D	E	W		P	O	I	N	T				+	7	9	.	9	°	C

- Transmission lost

*	N	A	M	E	O	F	L	O	G	G	E	R	3	/	L	O	S	T	*

When the transmission is lost, the DIS stops displaying the measurement and only displays the lost transmission alert.

- Battery

*	N	A	M	E	O	F	L	O	G	G	E	R	3	/	B	A	T	T	*
	T	E	M	P	E	R	A	T	U	R	E		+	9	9	.	9	°	C
	H	U	M	I	D	I	T	Y						3	3	.	1	%	
	D	E	W		P	O	I	N	T				+	7	9	.	9	°	C

When the user acknowledges the Battery alert, the level of battery is displayed on the confirmation screen:

*		N	A	M	E	O	F	L	O	G	G	E	R	3	4	5	6		*
>	L	O	W		B	A	T	T	E	R	Y						1	8	%

3.2 Supported loggers

The DIS3x can display the measurement of the following loggers:

- LOG26, LOG36, LOMxx
- LGR36, LGR46,
- LGR37
- LGR33
- LOG20, LOG22, LOG25,
- LGR32, LGR64

3.3 Technical characteristics

3.3.1 Models



Figure 1: DIS30 front face



Figure 2: DIS31 front face

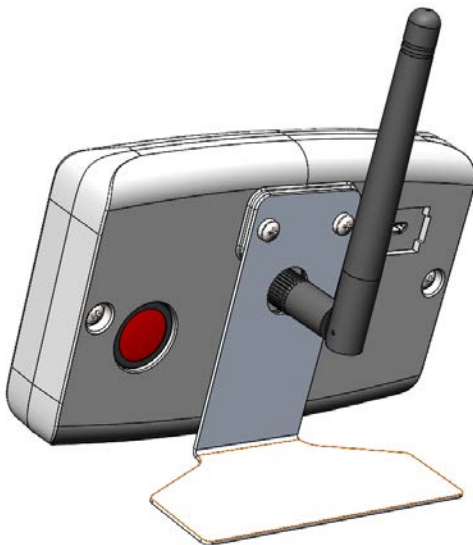


Figure 3: DIS30 rear face



Figure 4: DIS31 rear face

- DIS30 : for use in an office, power supply connector : micro-USB
- DIS31: for use in a truck, power supply connector : RJ45

3.3.2 Casing

Characteristics	Newsteo
IP Level	IP30
Fixation	DIS30 : aluminium square to set it on a horizontal surface DIS31: system to paste the DIS 31 to the windshield (see Figure 4: DIS31 rear face)
Colour	Grey
Dimensions (w/o foot)	H:80 mm; L:125mm; D:22mm

3.3.3 Power supply

Characteristics	DIS30	DIS31
Power supply	12-30 Volt AC adapter included (micro USB – Main power)	12-30 Volt No power adapter included See 4 <i>DIS31 accessories</i>

3.3.4 Other characteristics

Characteristics	DIS30	DIS31
Antenna	External ¼ wavelength antenna	Serigraphied antenna, inside the casing
RF range	About 200 meters in free land Can operate through 1 or 2 walls in in-door use	About 50 meters in free land Can operate inside a truck, transmission efficient between the cabin and the trailer

3.4 Certifications

Products certified for radio use in Europe, on the frequency of 868 MHz (ISM band). For use in another area, check with local authorities.

4 DIS31 accessories

The DIS31 accessories are not included in the product reference. The user has to choose and order separately the wished power adapter.

4.1 PFPN-CNX30-002: External connection device



Figure 5: External connection device delivered with a cable

Characteristics	PFPN-CNX30-002
Product type	External connection device
Connection	Supply the device through the terminal block [typical value: 12V] Connect the supplied RJ45 cable on one side on the CNX30 and on the other side on the DIS31
Cable length	3 meters

4.2 PFPN-ADAPT-007: Cigarette lighter adapter



Figure 6: Cigarette lighter adapter

Characteristics	PFPN-ADAPT-007
Product type	Cigarette lighter adapter for DIS31
Connector	RJ45 (to be plugged directly on the rear of the DIS31)
Cable length	3 meters