VEGAPULS Air 41/42

Version, available since	Description

2.0.1, 5/2023	**Function extensions**
	- Software update of the complete device via Bluetooth and mobile radio
	- Extension of the transmission packages for mobile radio and LoRa
	  ○ Information packages in case of change
	  ○ Deactivation message in the Cloud
	  ○ Transmission of additional measured values such as percent, lin. percent and scaled (only LoRa)
	  ○ Transmission temperature unit
	- Adjusted unit of the physical measured value and the temperature affects the transmitted measured value
	- Maintenance slot can be booked for service
	- During a Bluetooth connection, the position is not constantly determined, but must be triggered by action
	- Improved position determination through A-GPS
	- Acceptance and transmission of the position of the adjustment tool
	- Event-controlled measurement and transmission interval, change of transmission interval when a certain event occurs
	- Deactivation via return channel
	- Trigger for position determination to 65°
	- Mobile radio
	  ○ Collective transmission possible (measure hourly, send daily)
	  ○ Implementation of the Connection ID
	  ○ Adaptation bands for Canada and Australia
	  ○ Deactivation of the radar measurement during transmission
	  ○ Use of current encryption methods
	  ○ Energy savings through the use of Release Assistance Indication
	- LoRa
	  ○ The target system for the measured values can be selected and thus adjustment, linearisation and scaling can be adjusted for external systems
	  ○ VVO return channel
	  ○ Band AU915 for Australia
	  ○ Repetition of the Join in the AU915 band (8x)
	  ○ Emitted power for Australia/New Zealand in the AU915 band reduced
	
	Error corrections
	- Transmission of the correct transmission interval in 24-hour mode
	- Transmission of an NAN in case of unsuccessful position determination
	- LoRa: Setting default settings before a Join

1.2.1, 3/2022	**Function extensions** - Mobile radio ○ IMEI readable

Overview of the software versions

Version, available since	Description
	Error corrections - LoRa ○ ADR functions also with NBTrans > 1

1.2.0, 11/2021	**Function extensions**
	- Mobile radio
	  ○ Extended error handling if no connection to the server can be established
	  ○ Release band 28 for Germany
	- LoRa
	  ○ Adaptations for LoRa software 1.1.6
	  ○ New bands available IN868, AU915, KR920 (only with LoRa software 1.1.6)
	  ○ When a join is triggered, the spread factor, data rate and repetitions are set to default.
	  ○ Assignment of country to band adapted
	  ○ Reset value changed from ADR to ON
	
	Error corrections
	- Mobile radio
	  ○ Unnecessary additional dialling into the mobile network prevented
	- LoRa
	  ○ Device answers to LinkADRReq sommand (only with boot part software 1.0.2.1)
	- Position determination
	  ○ No more position determination despite deactivated position determination when changing radio cells
	- In general
	  ○ No more faulty entry (inconsistent software configuration) in diagnostic memory during software update

1.1.0 5/2021	**Function extensions**
	- Return channel via mobile radio
	  ○ Transmitting interval can be changed
	  ○ Measured value determination and transmission repeatable
	  ○ Position determination enforceable at next measurement
	  ○ LoRa Join executable
	  ○ …
	- Mobile radio
	  ○ eDRX possible
	- Software update
	  ○ Software update of the mobile modem via mobile radio possible
	- LoRa + Mobile radio

Overview of the software versions

Version, available since	Description
	○ Each time the sensor is activated via NFC or magnetic pen, a join (LoRa only) and a measured value transmission is triggered - Inclination angle ○ No more error status is set for inclinations above 20° - Transmission interval ○ Reset values to 6 hour interval - Position determination ○ The position is determined when the radio cell is changed **Error corrections** - Bluetooth ○ Optimization when using smartphones
1.0.0, 1/2021	First sales version

Legend:

Name	Description
Version	xx.yy.zz xx: Compatibility version. Will be increased when the compatibility to the previous version is no longer given. Value range 0 … 99. yy: Function extension version. Will be increased when new functions or function changes were carried out on the previous version. Also errors can have been corrected with a function change. Value range 0 … 99. zz: Error correction version. Will be increased when only errors were corrected on the previous version. Value range 0 … 99.
available since	Month/Year