

Continuous level measuring system **NR 3000** FDT / DTM / USB-HART-Converter



Table of contents

	Page
FDT	2
PACTware 4.1 / DTM / Connection USB-HART Konverter	3
Connection setup / Quick Start Wizard / Diagnose	4 - 8

Subject to technical change

We assume no liability for typing errors.







FDT (Field-Device-Tool)

What means FDT Technologie?

FDT standardize the interface of communication and configuration between all field devices. Every device can be configurated, served and maintained by the standardized software interface - independend of manufacturer, type or communication protocol.

FDT supports HART, PROFIBUS, FOUNDATION Fieldbus, DeviceNet, Interbus, AS-Interface and further fieldbuses.

A driver must be installed, to enable the FDT software to communicate with the sensor. This driver allows the access to the device parameter, configuration and service of the sensors and makes a diagnose possible. This driver is called DTM (Device Type Manager). The DTM is devided in two categories:

- DeviceDTM for the connection to the configuration components of the field device.
- CommDTM for the connection to the software communication components (z.B. USB/HART-converter).







PACTware 4.1 / DTM / Connection USB-HART Converter

Download Software

The FDT software PACTware 4.1 is available as freeware on the internet. It can be downloaded for free via following link:

https://www.uwt.de/downloads.html

At this link you find also the driver software CommDTM and the DeviceDTM for the Nivoradar 3100.

The FDT software and both DTM of the sensor has to be installed at the PC after the download.

Connection USB/HART Converter

UWT offers the USB/HART converter Viator from MACTEK. To use this converter please install the driver at your PC.

The electrical connection between PC and the device NR3100 has to be done as follows:



At the following pages the connection setup in PACTware is described.







PACTware 4.1

Connection setup

Open PACTware and click to "View" and "Device-catalog" and then go to "Update device catalog". Now all current DTM driver will be loaded.

After that click to "Add device" and confirm the HOST connection with the CommDTM "HART Communication".



By a doubleclick to COM1 the COM parameter opens. Set the interface to HART modem and the right COM Port (HART-converter).





NivoRadar® Continuous level measuring system FDT / DTM / USB-HART-Converter



PACTware 4.1

After you completed the connection to the converter click again to "Add device". Now you can choose and confirm the device DTM Sitrans LR560 (NR3100).

			1			
DACTuesto						
File Edit View Project Device	Extras Window Hel		Service Service	1000		A DESCRIPTION OF THE OWNER OF THE
		101				
		<u>idad</u>				
		Device for				
			All Devices			
		Device	Device	 Protocol 	Vendor	Group
		다 춫 Driver	🚳 SITRANS LR560	HART	Siemens AG	FDT
		Vendor Group Type Protocol				
		Show unselected devices too		III		• • •
		All Devices	*			
						OK Cancel
			SI	upported by		
			IC	SGmbH		

To connect the FDT software and the device click to "Connect".



Now you can do the basic setting of the device or check different diagnose parameter.



NivoRadar[®]

Continuous level measuring system **NR 3000** FDT / DTM / USB-HART-Converter



PACTware 4.1

Online Setup

To access the quick start wizard of the LR560 (NR3100) click to "Device", "Parameter", "Online parameterization"



Now the setup-surface for the NR3100 opens. Via "Wizards" you come to the quick start wizard, where you can do all important parameters for the application.





FDT / DTM / USB-HART-Converter



PACTware 4.1

Quick start wizard with the main parameters of the application.



To do a diagnose of the echo profile go to "Echo Profile Utilities" after you completed the quick start wizard. With a click to "Echo Profile" an echo profile is actvated. Confirm with OK. After a few seconds the echo profile appears.



NivoRadar[®]

Continuous level measuring system **NR 3000** FDT / DTM / USB-HART-Converter



PACTware 4.1

Diagnose

Following important points can be checked:

- Is a false echo present?
- Has the level echo the right position?
- Is there enough echo confidence (at least 5)?
- How is the TVT line?
- Are reflexions from the nozzle visible?



Pactware 4.1 offers many other features, which are described in the documentation 4.1 Pactware. This can be downloaded at following link. http://www.icsgmbh.de/en/download-en/pactware-4-1.html

