

# KROHNE GDC DTM Readme

How to use GDC DTMs for communication with GDC devices

## Principles

### Old GDC Communication Principle (DTM Versions 1.4.0)

The "KROHNE USB to GDC Adapter DTM 1.4.0" as well as "KROHNE GDC to HART Gateway DTM 1.4.0" are both required in addition to the e.g. IFC100 DTM when operating e.g. the OPTIFLUX IFC100 via the optical or electrical GDC interface using an FDT 1.2 based operating tool, e.g. Pactware.

The OPTIFLUX IFC100 optical or electrical GDC interface is accessible via the device display. The "KROHNE USB to GDC Adapter DTM 1.4.0" is the driver DTM for the "USB to GDC Adapter". The "KROHNE GDC to HART Gateway DTM 1.4.0" is not assigned to any hardware component. Instead, it provides a (software-) interface between the "KROHNE USB to GDC Adapter DTM 1.4.0" and the e.g. "IFC100 HART DTM". The allocation of DTMs representing the plant topology is as follows:

Device tag	Address
HOST PC	
GDCAdapter	
GDCGateway	
IFC100	0

In a second step, connect the "GDC/USB Adapter" to the PC (USB port) and to the optical or electrical GDC interface in the IFC300 display. Select the correct adapter address (usually "0") in the "Parameter" menu of the "KROHNE USB to GDC Adapter DTM 1.4.0". You can control the correct connection conditions using the "Diagnosis" menu.

The "KROHNE USB to GDC Adapter DTM 1.4.0" supports the "USB to GDC Adapter" only.

### New GDC Communication Principle (DTM Version 2.x.x)

The new "KROHNE USB to GDC Adapter DTM 2.x.x" supports both, the small "USB/GDC Adapter" and the "USB-Adapter Plus". In addition, the DTM combines driver and gateway functionality in a single DTM. This

implies: the device DTM can be connected directly to the new "USB to GDC Adapter DTM 2.x.x" without using any (software) gateway DTM.

Device tag	Address
HOST PC	
GDCAdapter	
IFC100	0

### Installation and Parallel Usage

- Old and new communication principle can be installed on the same machine and will appear in the device catalogue as follows:

Device	Protocol	Vendor	Group	Device Version
GDC to HART Gateway	GDC - HART	KROHNE	DTM specific	1.04.0000 / 2008-09-29
GDC-USB Adapter	GDC	KROHNE	DTM specific	1.04.0000 / 2009-09-30
GDC-USB Adapter 2	HART	KROHNE	DTM specific	2.0.3 / 2010-10-05

- Do not use both principles at the same time in the same project! This may result in driver conflicts on your machine.
- However, it is possible to use more than one GDC-Adapter Plus at the same time. Determine the adapter to use in the "Parameter" menu of each "KROHNE USB to GDC Adapter DTM 2.x.x"

Device tag	Address
HOST PC	
GDCAdapter	
IFC100	0
GDCAdapter	
IFC100	0
GDCAdapter	
IFC100	0

- If you have no GDC Driver installed yet, install "KROHNE USB to GDC Adapter DTM 2.x.x" only. The old versions are no longer necessary.