## PRODUCT DATA

## PULSE Generic Auxiliary Digital Interface (GADI) Type 3099-E

## Features

- Interface your digital process data into your PULSE ${ }^{\text {TM }}$ LabShop application
- Integration of auxiliary parameters with dynamic data such as FFT, Order and CPB spectra
- Data available as instantaneous, instantaneous maximum, instantaneous minimum, linear average, averaged maximum, and averaged minimum


## Benefits

- Measure auxiliary parameters as a function of time
- Use process data as logging or multi-buffer tags
- Record process data along with dynamic channels with Data Recorder Type 7701 in PULSE LabShop


## Introduction

PULSE Generic Auxiliary Digital Interface (GADI) Type 3099-E is an extension to PULSE LabShop Front-end Drivers Type 3099-A that allows you to insert 'slow' digital process values into the LabShop data stream. Here they appear as auxiliary data and can be used similar to analogue auxiliary data (temperature, oil pressure, wind speed, etc.).

With GADI you can integrate process data that are already available in digital format and stream them to your PULSE LabShop application.

Fig. 1 Using GADI with digital process data and measuring sound and vibration data



Setup and Integration of GADI
Setup and integration of GADI require a programmer who has knowledge of your process data and will make the final programmatic integration with your PULSE LabShop application. This means that a programmer who knows your process protocol and can pick out individual data can, with Type 3099-E, get these data into the application.

Since these process data samples are provided one at a time and are time-stamped by PULSE when they are received, there may be a small uncertainty imposed by the Windows ${ }^{\circledR}$ operating system. Likewise, the data is not buffered and streamed over the LAN in the same way as normal high-speed input channels and may, therefore, be slightly offset. GADI, however, tries to align to normal buffering and transmission delays.

It is estimated that in a well-configured, modern system, it is possible to have 100 GADI channels delivering data at 100 Hz sample rate, with a time accuracy better than 50 ms .

## SUPPORTED FUNCTIONS

Auxiliary Parameter Logging (see BU 0229)

## PREREQUISITES

The following products are required:

- PULSE LabShop 17.0 or later with FFT \& CPB Analysis Type 7700, FFT Analysis Type 7770 or CPB Analysis Type 7771
- PULSE Front-end Driver Type 3099-A or PULSE VXI Front-end Driver Type 3099-D

INSTALLATION
Installation examples in C++ and in C\#/.net are provided in PULSE Knowledge Library. Building the GADI demo components (found in Pulse Knowledge Library) and registering them are done using Visual Studio ${ }^{\circledR} 2008$ or later

## Ordering Information

| Type 3099-E-F | PULSE Generic Auxiliary <br> Digital Interface (GADI), <br> Floating Licence | Type 3099-E-N | PULSE Generic Auxiliary <br> Digital Interface (GADI), |
| :--- | :--- | :--- | :--- |
|  |  |  | Node-locked Licence |

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