

# cronologic

Ndigo5G-PCIe  
USER GUIDE



[www.cronologic.de](http://www.cronologic.de)

# Ndigo5G-PCIe

# 1 Introduction

The Ndigo5G is a digitizer and transient recorder designed to sample relatively short pulses in rapid repetition. It produces a stream of output packets, each containing data from a single trigger event together with a timestamp.

By default the Ndigo5G is equipped with a passive cooling system. If necessary, the unit might be ordered with an active cooling system on demand (see [Figure 1.1](#)).

## 1.1 Features

- **10 bit** dynamic range
- Up to **5 Gsps** sample rate (in 1 channel mode) for increased resolution in time domain.
- Up to **4 channels** for your individual measurement setups.
- Digital input with TDC that can also be used for gating and triggering.
- 2<sup>nd</sup> digital input for gating or triggering.
- PCIe 4x1.1 with **800 [nwb/s] MB/s throughput** for simple and fast data transfer to most PCs.
- Multiple boards can be synchronized via reference clock if more channels are required.
- Extension board available with 4 additional digital inputs.



Figure 1.1: Overview of the Ndigo5G equipped with active cooling system.