



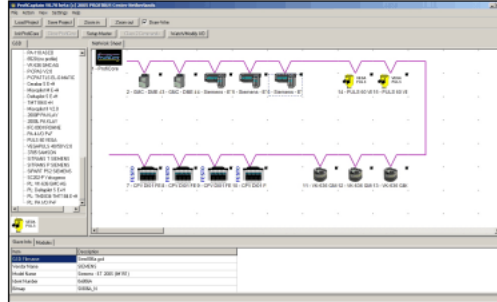
# ProfiCaptain – On-Line Diagnostic, Test, and Configuration



## Introduction

ProfiCaptain is a PC based PROFIBUS DP master that has been designed for applications like: I/O tests, commissioning, parameterization and demonstrations. It fills the gaps that other products leave open and makes working with PROFIBUS a lot easier, faster and more fun.

The main platform is a configuration environment in which the user can setup his slaves with the respective modules and parameters. After setting up the network, the user puts them online without compilation or download. The I/Os can simply be watched and manipulated. If needed, class 2 functions can be used on all addresses in the network, even if they are not configured or belong to another master. The software runs on the USB hardware (ProfiCore) that is the same as the [Analyzer](#).



## Application areas

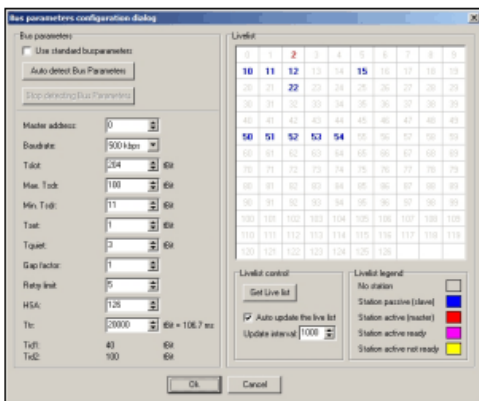
- ▶ I/O testing and address setting for cabinet builders
- ▶ Manual override for process operators
- ▶ Product testing for integrators and manufacturers
- ▶ Product evaluation
- ▶ Product demonstration
- ▶ Education

## Background information

This tool has been developed because of high investments in hardware and software just to test, evaluate or demonstrate PROFIBUS products (PLCs, PC cards, power supplies and cables). If people have the means to invest, than not all communication functions are available and it requires knowledge about tools and programming. ProfiCaptain is a perfect solution for a small and easy to handle master system.

## Special features that only this product supports

- ✓ Automatic detection of the busparameters
- ✓ Brand new concept of 'stealing' slaves
- ✓ Class 2 functions in a Class 1 framework
- ✓ I/O testing with automatic patterns
- ✓ No shutdowns when updating the configuration
- ✓ Deactivating slaves in the configuration



## Software Features

- ▶ Works on PCs/PGs and Laptops with a communication processor attached to the USB port ([ProfiCore](#)).
- ▶ Supported operating systems: **Win98(SE), Win2000, WinXP.**
- ▶ Language: **English.**

### Stealing slaves

- ▶ Stealing slaves from other masters without removing them from the bus or shutting the masters down.

### Automatic detection of the busparameters

- ▶ Detection of busparameters (Tslot, MaxTSDR, Tset, etc).
- ▶ Suggested master address.
- ▶ Dynamic Live List.
- ▶ All baudrates are supported (9.6 kbit/s to 12 Mbit/s).
- ▶ Prevention of accidental shutdowns.

### I/O Testing

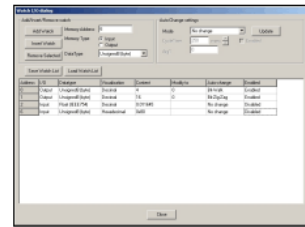
- ▶ Watches and modification on selectable variable types (bool, hex, decimal, float, etc).
- ▶ Automatic patterns (bit walks, zig-zags and counters).

### Acyclical class 2 functions

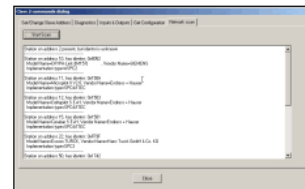
- ▶ Acyclical class 2 functions on all addresses.
- ▶ Set Slave Address.
- ▶ Read Inputs/Outputs (of every slave in the network).
- ▶ Get Configuration.
- ▶ Get Diagnostics.
- ▶ Automatic identification of all the slaves in the network (address, product name and Ident Number)

### Configuration

- ▶ User friendly configuration software.
- ▶ Easy network creation with advanced GSD import.
- ▶ No shutdowns when updating the configuration.
- ▶ Deactivating slaves in the configuratin when it is not required.



lenlarge - I/O watcher



lenlarge - Network scan

## Hardware Features

### ProfiCore

- Full speed USB interface.
- PROFIBUS baudrate max. 12 Mbit/s.
- Galvanic isolated PROFIBUS Interface.
- Latest RS 485 technology.
- Trigger output port for oscilloscopes (message capturing).
- Communication processor can be used by other applications (master functionality or analyzer).

