





**PDF** 

**PDF® Direct Printing with** Microplex printers

> **MAXIMUM PROCESS RELIABILITY** FOR **SMOOTH** PRODUCTION LOGISTICS PROCESSES

### FIELD OF APPLICATION

- > Integration
- **▶** Printing of encrypted PDF<sup>®</sup> files
- **D** Logistics, pharmacy, trade etc.

# **HIGHLIGHTS / FEATURES / SPECIAL ATTRIBUTES**

- ▶ Print PDF<sup>®</sup> documents directly without drivers
- Tamper-proof through unchanged printing
- Paper and cassette selection via port macros
- Scaling possibility while maintaining the proportions
- Applicable with thermal, single sheet and continuous printers

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## **MAXIMUM PROCESS RELIABILITY**

# FOR **SMOOTH** PRODUCTION

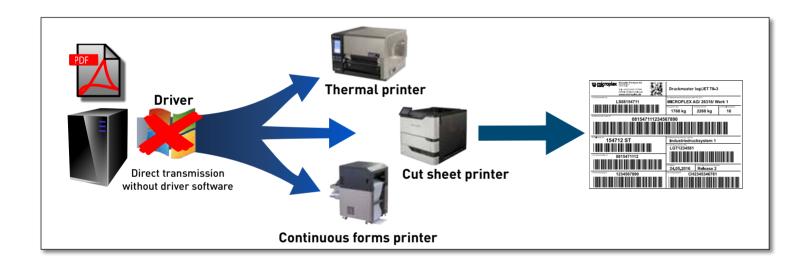
# AND LOGISTICS PROCESSES



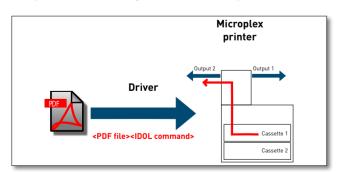
Direct PDF printing with support for paper handling functions is a new way of printing single and multi-page PDF documents with Microplex printers. With the Microplex printers of the latest controller generation (MPC 3.4, 3.6, 7.x, 8.x) it is possible to print PDF data directly. On Microplex printers, PDF data is output unchanged. You receive a 1:1 printout as the data were generated. In the case of delivery documents with barcodes, for example, these are printed legibly in the intended ratio. For this purpose, the original PDF data is transferred directly to the printer. This guarantees your system independence, no Windows drivers are required. The PDF data is output in the resolution of the printer.

Due to our ability to understand 40+ emulations/printer languages like IPDS, PCL5, IGP, ZPL and many more, Microplex printers are compatible to common ERP systems like SAP® and to other hard- and software system environments.

The PDF format is often used for printing business documents when this data is generated externally by e.g. Customers, service providers etc. These data should be used as unchanged as possible (security against manipulation). When using printing software and / or drivers there is always the risk that the print data can be changed slightly by these programs. For example, unwanted scaling can occur due to the physical properties of the printer. This can make barcodes illegible and thus interrupt the logistics chain or lead to extensive rework. This is not the case when using PDF direct printing with a Microplex printer.

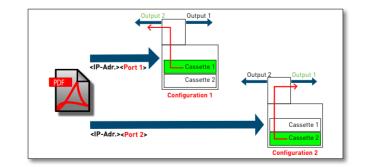


### Paper Handling with Microplex PDF® Direct Printing



#### Paper Handling with IDOL Commands

The PDF file can be preceded by IDOL commands with paper handling information. With this, commands for paper feed, paper output, simplex / duplex printing, format etc. are transferred to the printer.



#### Easy Configure Paper Handling

Several user configurations (port macros) with different basic settings can be defined in a Microplex printer and activated with the PDF file via port printing.



### PDF® Direct Printing in Plant Engineering

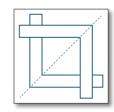


In addition to tamper-proofness, the direct printout of PDF data also serves to improve the performance of the entire system. PDF data that already exist and e.g. stored in a system database can be sent directly to the printer. There are no additional processing steps, you gain speed and reliability.

PDF data generated dynamically by the customer system can also be passed on to the printer without loss. It is guaranteed that the data is printed in the correct layout, with the correct fonts and, if applicable, logos. The system control merely supplements the commands for paper handling (paper feed, paper output, simplex/duplex printing, format etc.) or uses port macros for control, in which the corresponding specifications are stored.

Microplex printer with PDF® Direct Print cooperate with automatic systems. Microplex printers can be intelligently controlled and integrated as an active ingredient of a plant control system for the synchronization of logistic processes. The direct printout of PDF data can also be combined with the options Status-Out and GPIO (PLC control) on a Microplex printer. Here, page receipts can be automatically reported to the system or, if necessary, e.g. the printout can be released via an external PLC signal. This means that Microplex printers can be fully integrated into production systems. The printer then communicates directly with the controlling system, either via electrical signals GPIO (PLC control) or by means of text messages via the data interface (status-out).





In addition to the unchanged output, PDF files can also be **output scaled using IDOL commands**. This is always done while maintaining the aspect ratios so that no distortions occur. For example, A4 documents can be output with **"shrink-to-Fit"** on A5 paper. The scaling takes place in the printer. It is also possible to scale PDF files to any larger format using **"scale-to-fit"**. For this purpose, a PDF file is transferred to the printer in a data stream together with an IDOL command. The scaling always applies to a print job.



With the Microplex printers it is possible to print encrypted PDF files. For this purpose, the encrypted PDF file is transferred to the printer together with the password in an IDOL command. If the password is correct, printing begins immediately. No interaction on the printer is necessary. If the password is incorrect or missing, the printer stops with an error message. This ensures that the desired print order is adhered to.

#### An Overview of the Advantages:

- Cassette selection via predefined user configurations
- Configuration of the print settings via a comfortable web interface
- Paper handling information can be given individually to each print job
- Printing of encrypted PDF files possible

- Independent from the operating system, PDF versions 1.3, 1.4, 1.5, 1.6, 1.7 are supported
- Exact printout of the data as defined in the PDF, the data will be not changed via a driver
- Integration into production systems via GPIO (PLC Control) and status-out