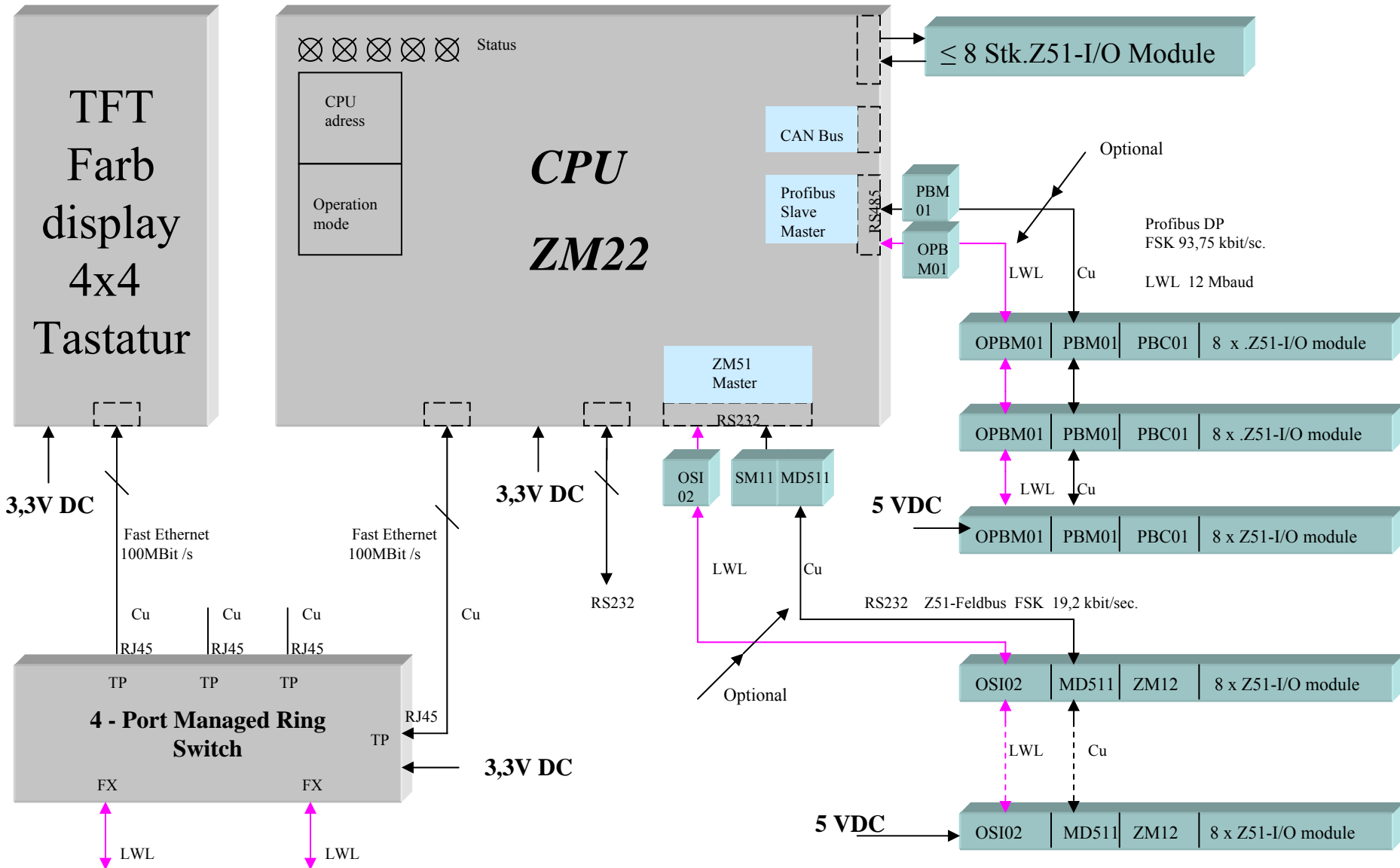
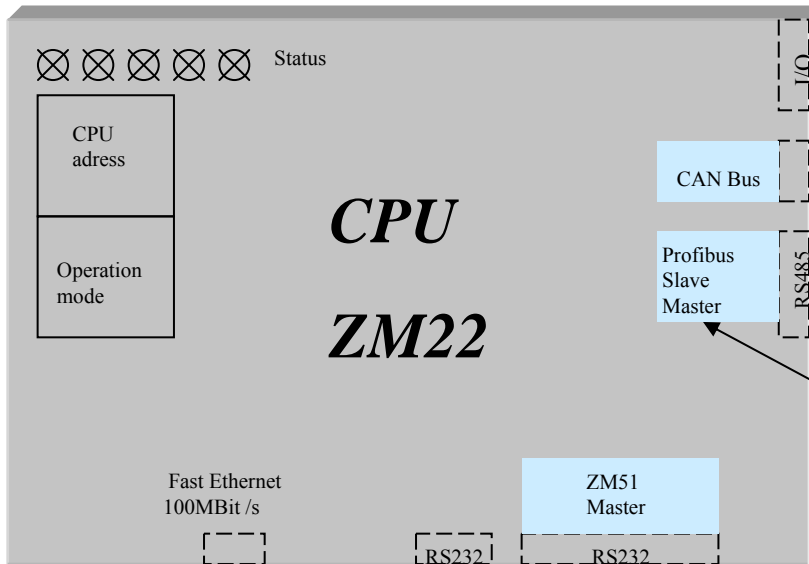




**Konzept der neuen I M1( M2 ) Ex ia I CPU  
inklusive Farbdisplay, Switch, usw. ...**



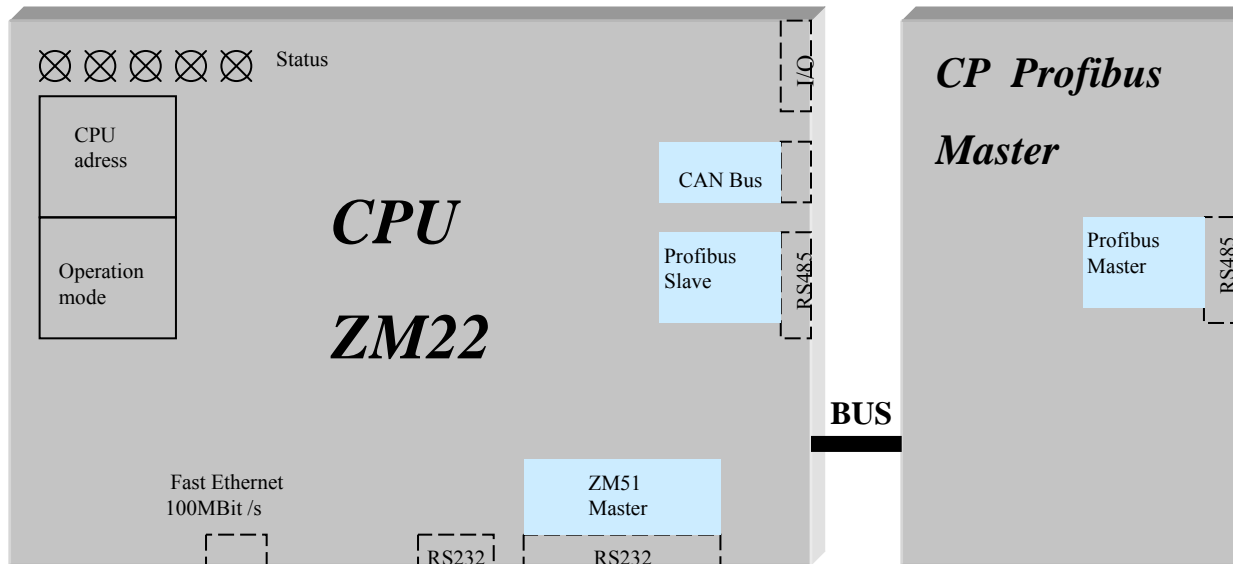
# Konzept Z51-ZM22



Master Funktion  
= Soft PLC

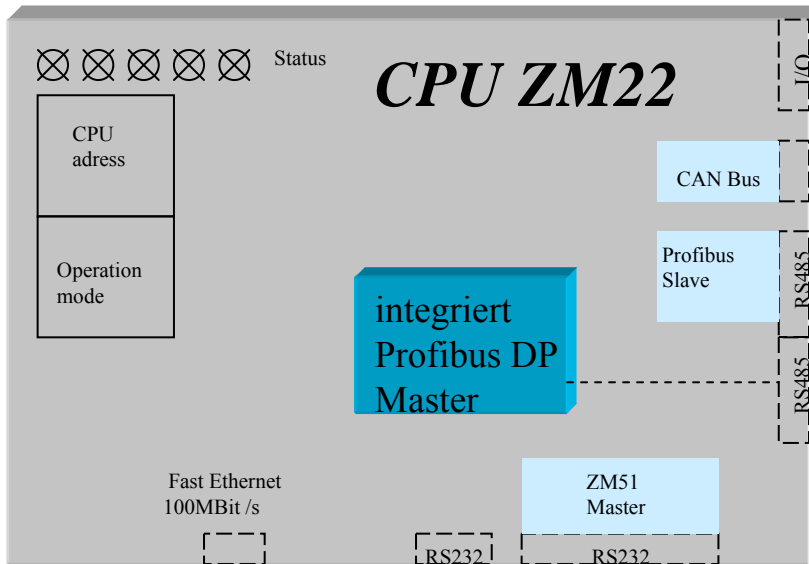
**I M1 Ex ia I**

***M1 Version von Z51-ZM22***



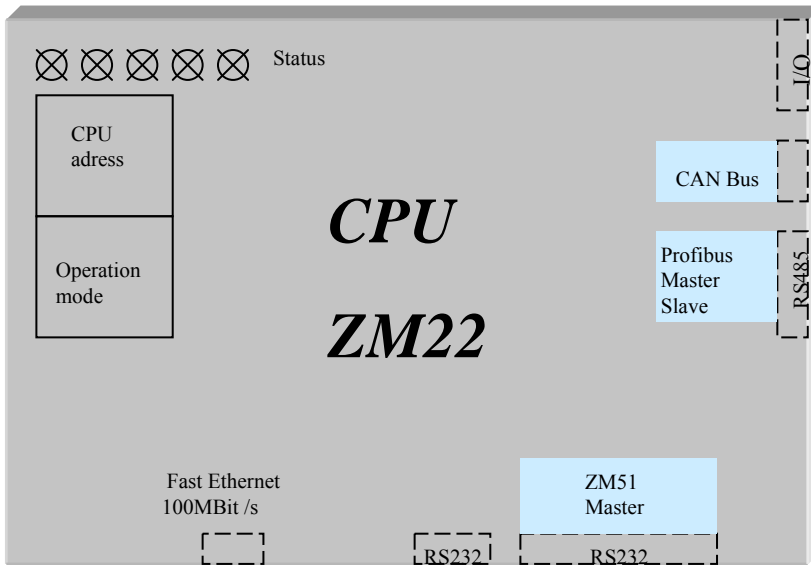
**I M2 Ex ia I**

***M2 Version von Z51-ZM22***



**I M2 Ex ia I**

***M2 Version von Z51-ZM22***

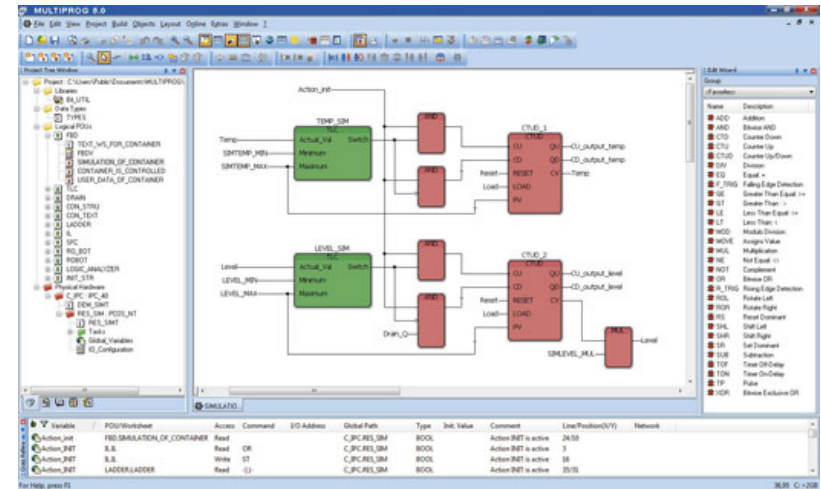


## IEC 61131 PROGRAMMING SYSTEM MULTIPROG® 5.0

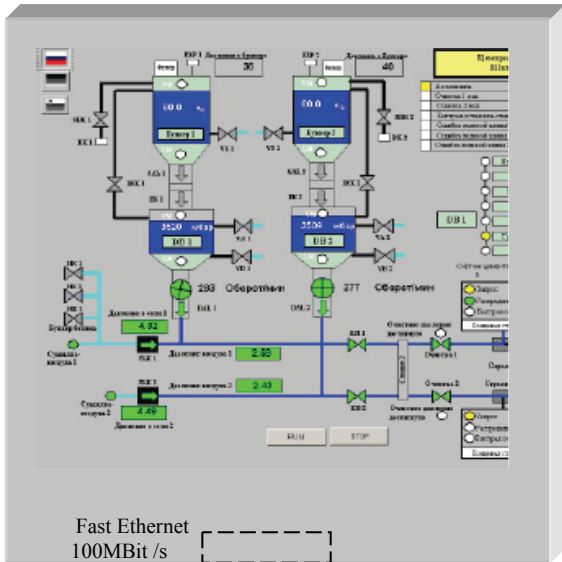
### IEC 61131 programming languages

- Instruction List (IL)
- Structured Text (ST)
- Function Block Diagram (FBD)
- Ladder Diagram (LD)
- Sequential Function Chart (SFC)

All programming languages can be mixed within one project.



# Programmierung CPU Z51-ZM22

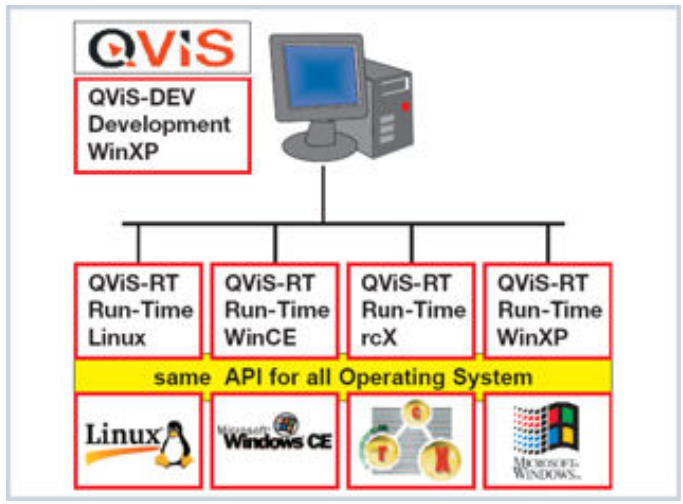


# TFT Farb Display 4x4 Tastatur

- Ein Visualisierungstool zur Projekterstellung (project.bin) für alle Run-Time-Systeme
- Run Time System für

- Linux
- WinCE
- rcX
- WinXP

Fast Ethernet  
100MBit/s



schlankes Visualisierungssystem speziell für Embedded entwickelt

offene Treiberschnittstelle zur SPS

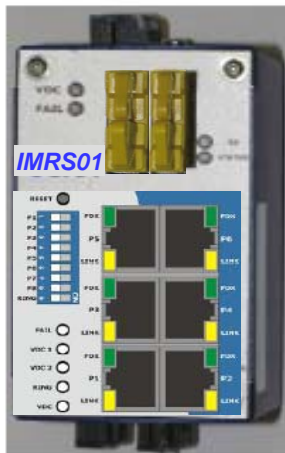
Leistungsstark auf Risc Prozessoren

Verfügbare Treiber

- Beckhoff TwinCat (ADS)
- Siemens S7 (RFC1006)
- CoDeSys
- Offene Treiber

## Programmierbares Farb Display

# eigensicherer managebarer Ring Switch



- 6 x 10/100TX ( RJ45) + 2 x 100FX (E2000)
- IEEE 802.3 10Base-T , 802.3u 100Base-Tx/1000Base-Fx
- RJ45 Auto MDI/MDI-X function
- Store-and-Forward Switching Architectur
- Redundant power supply input 12VDC
- Web Management GUI
- IGMP
- SNTP/SMTP
- VLAN / 802.1 Q Tag VLAN
- DHCP Client
- SNMP, Web Management , RMON
- Optical Budget 16dB
- LWL connector E2000
- Transmission path 30km
- Wavelength 1300 nm
- Singlemode 9/125 um
- Temperature range -30 ...+ 750C
- I M1 Ex ia I

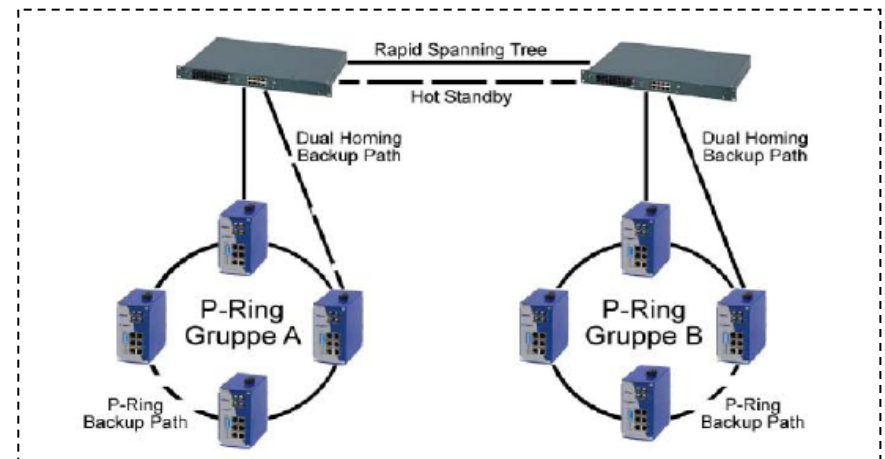
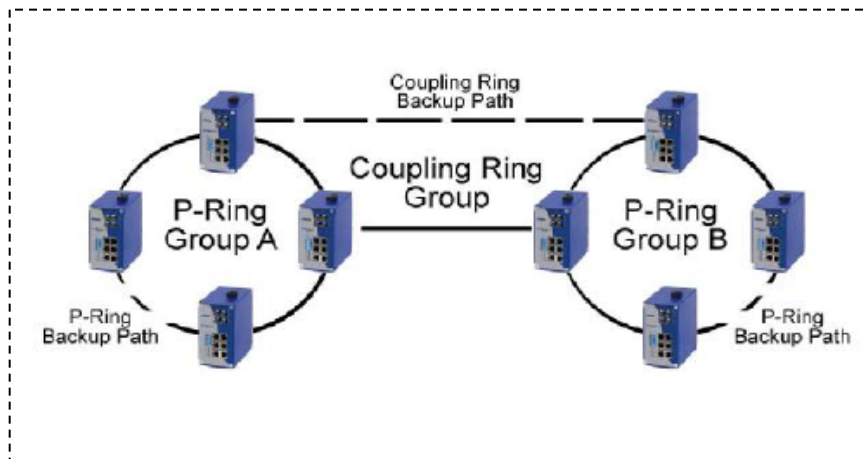
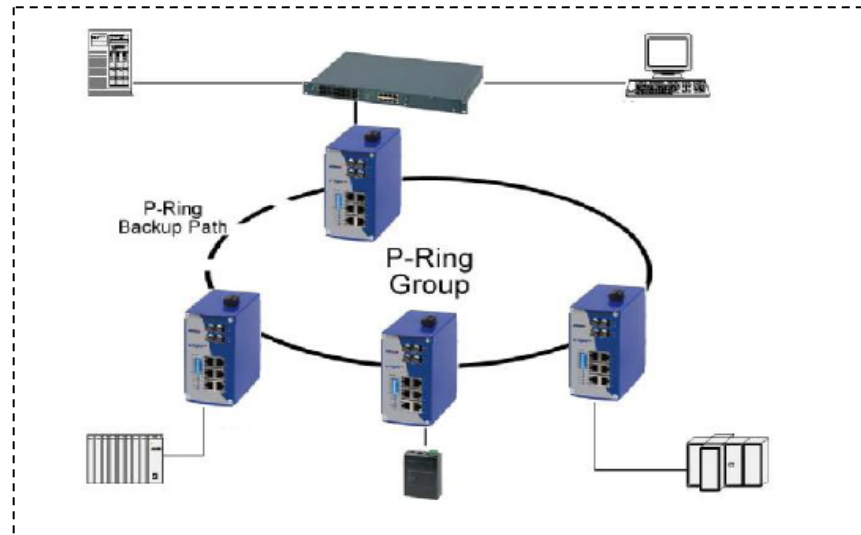
*Programmierbare Switch*



# Ring Funktion

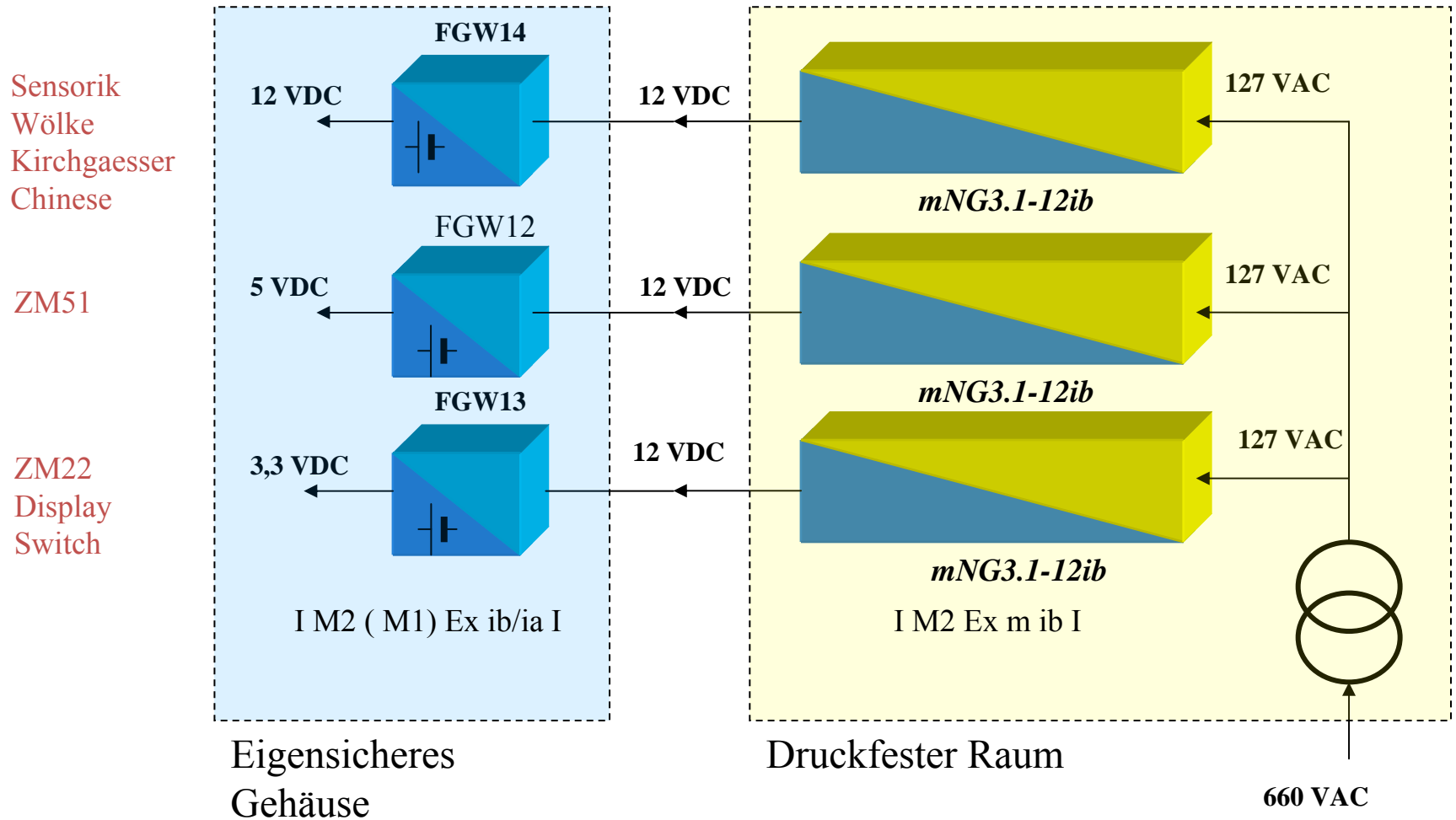
**Pathfinder Ring ( P-Ring)  
with recovery time < 300ms**

**Couple Ring,  
Dual Homing**



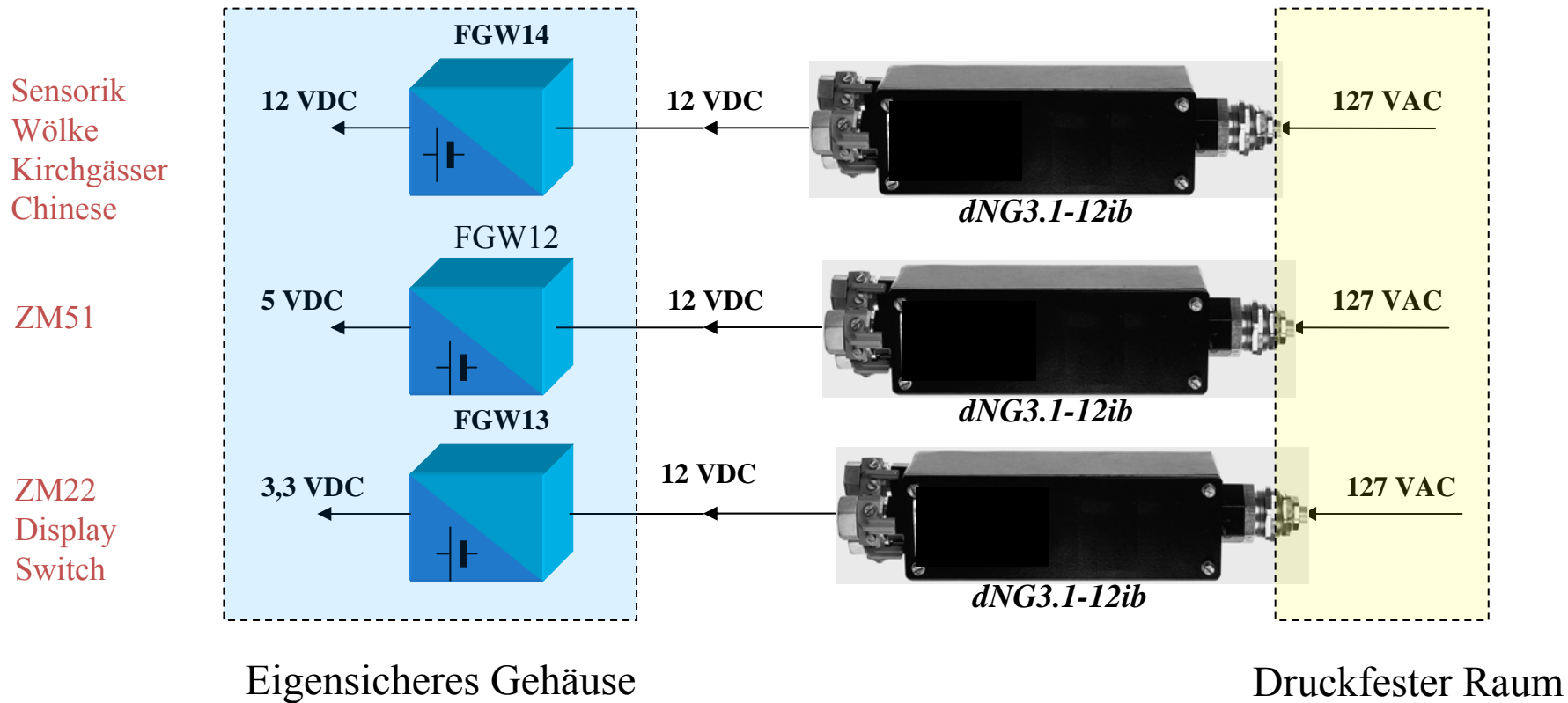
*Programmierbarer Switch*

# Eigensichere Stromversorgungen für druckfeste Gehäuse und DC/DC Wandler mit Notstromfunktion in eigensicheren Gehäusen



***Konzept eigensichere unterbrechungsfreie  
Stromversorgung***

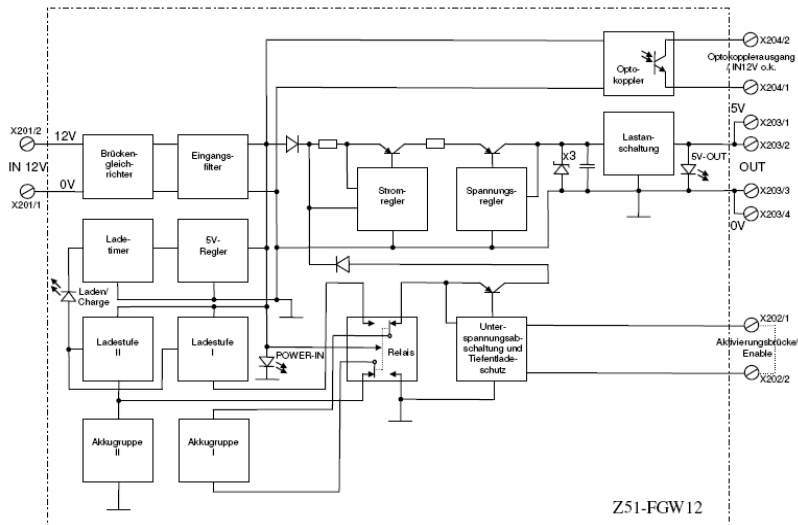
# Eigesichere Stromversorgung zum Anbau an druckfeste Gehäuse und DC/DC Wandler incl. UPS Funktion in eigensicheren Gehäusen



**Konzept eigensichere unterbrechungsfreie Stromversorgung**

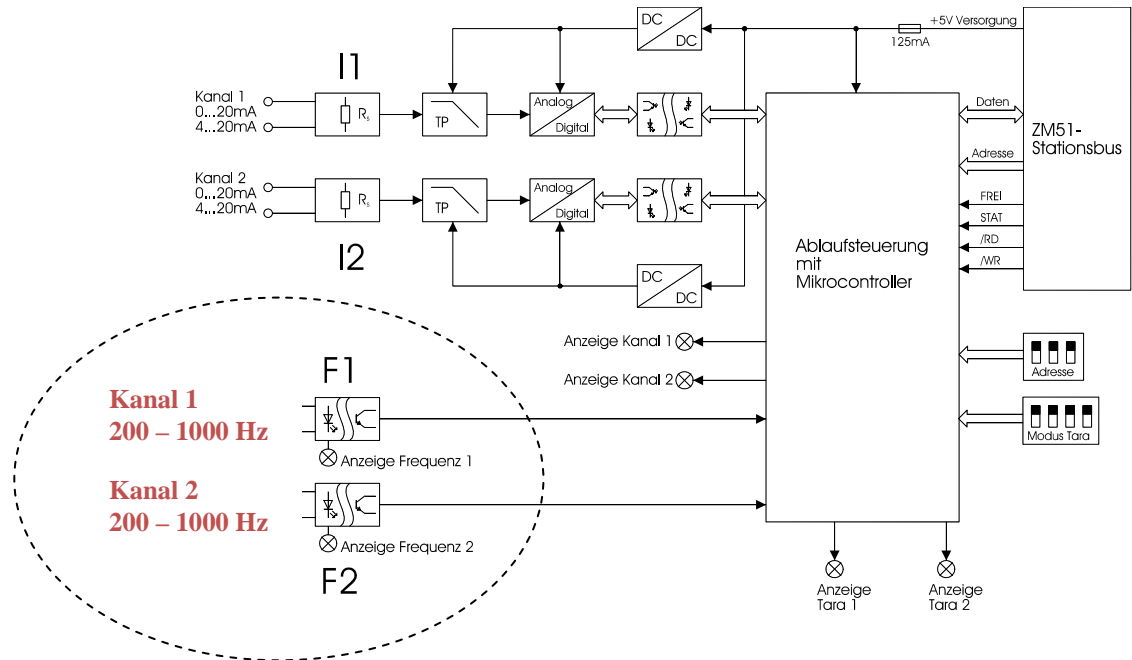
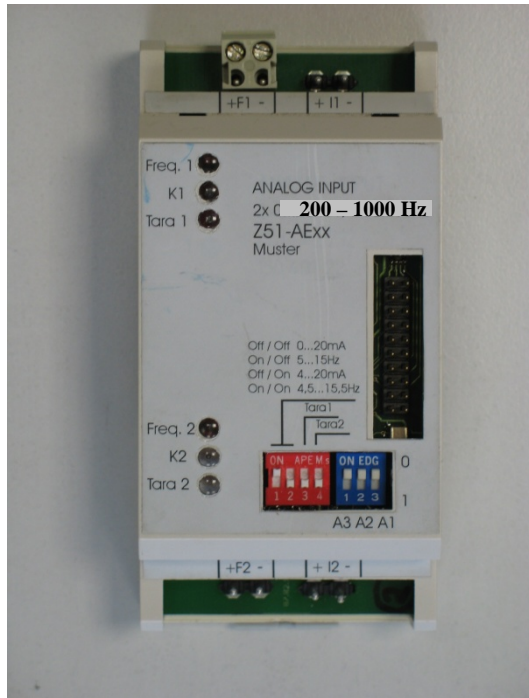


- Schutzart I M2 (M1) Ex ib/ia I
- Versorgung mit 3.3 V, 5 V und 12 V Verbrauchern nach Spannungsausfall
- NiMH Akkumulator als Energispeicher
- Eigensichere Eingangsspannung
- eigensichere Ausgangsspannung Kategorie ia (3,3 ,5 , 12VDC)
- für Anwendungen in ZM51 Unterstationen
- für Montage auf DIN Schienen



## Konzept UPS FGW12 - 14

**Funktionen:**  
**Erfassung von zwei analogen Prozesssignalen**  
**0-1,0mA / 0,2-1,0mA oder 5-15Hz / 4,5-15,5Hz, 12 Bit Auflösung**  
**Tara-Funktion**  
**galvanische Trennung**  
**Hutschienenmontierbar**  
**I M1 Ex ia I**



**Analog Modul Z51-AE251 200....1000Hz**

# Monitoring



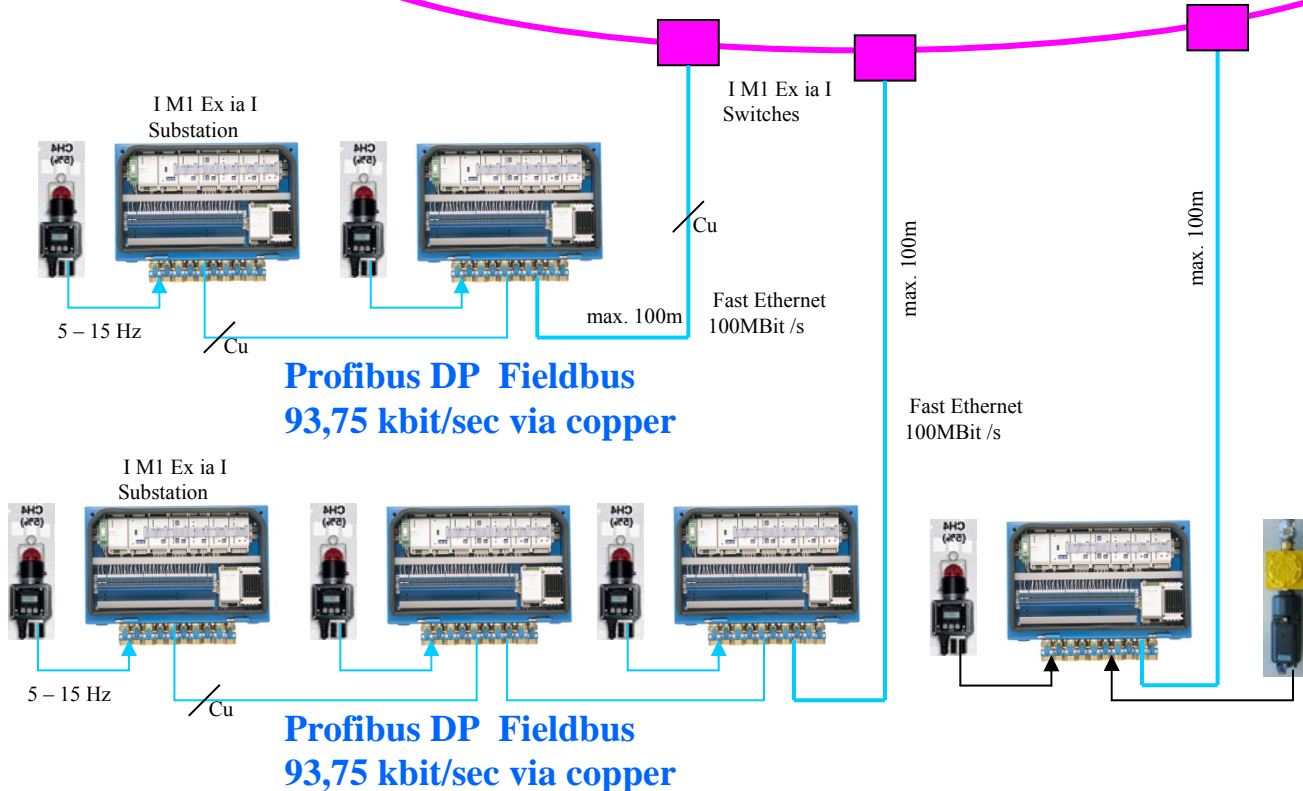
Übertage

Untertage

Redundant fibre optic backbones

Fast Ethernet  
100MBit /s

# M1

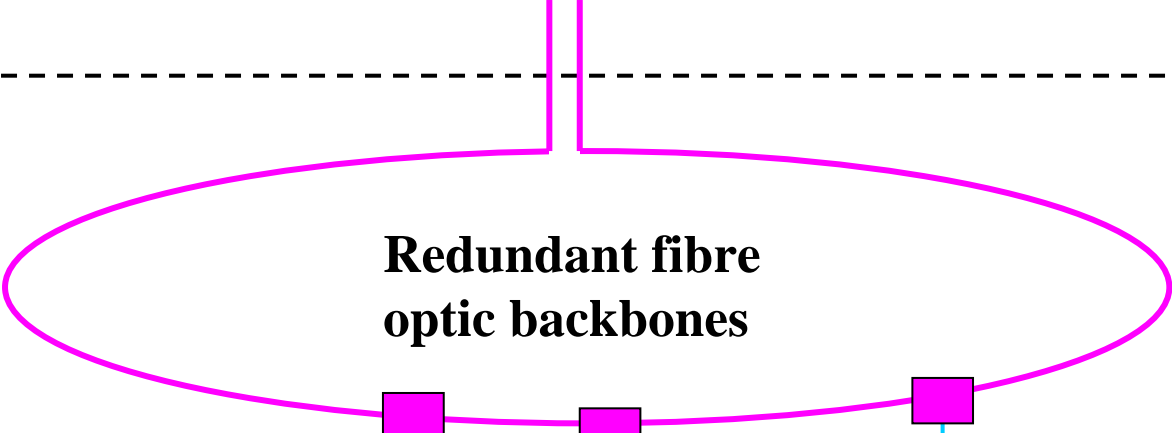


# Monitoring



Übertage

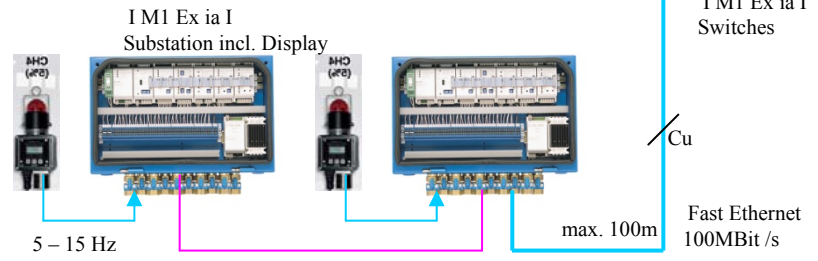
Untertage



Fast Ethernet  
100MBit /s

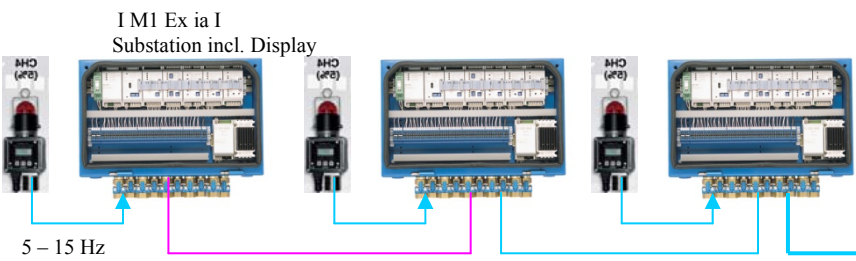
Redundant fibre  
optic backbones

# M1

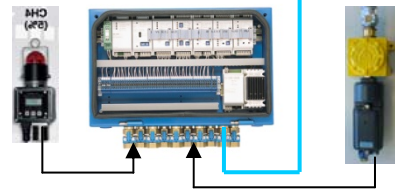


Profibus DP Fieldbus  
12 Mbaud via fibre

Fast Ethernet  
100MBit /s



Profibus DP Fieldbus  
12 Mbaud via fibre

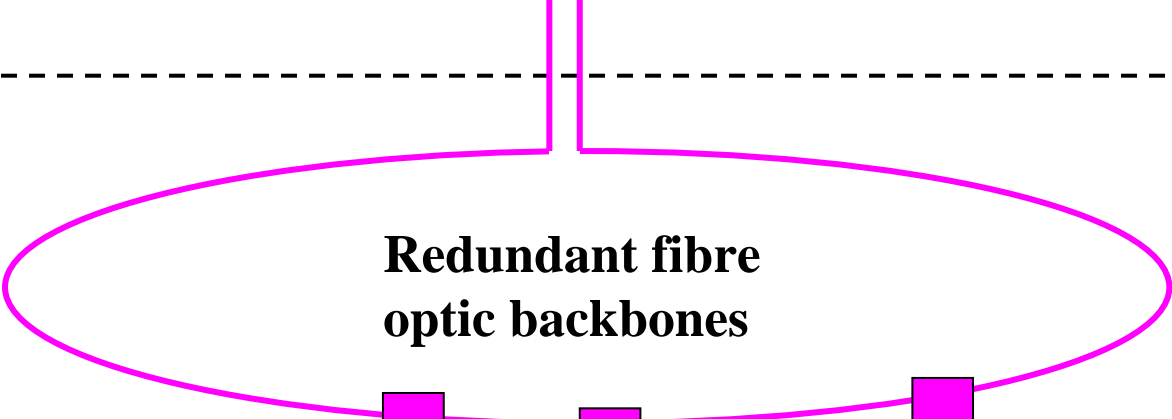


# Automation



Übertage

Untertage



**Redundant fibre  
optic backbones**

**Fast Ethernet  
100MBit /s**



Industrial Ethernet  
Switches



**Profibus DP Fieldbus  
93,75 kbit/sec via copper**



**Profibus DP Fieldbus  
93,75 kbit/sec via copper**

Fast Ethernet  
100MBit /s

Fast Ethernet  
100MBit /s

# M2



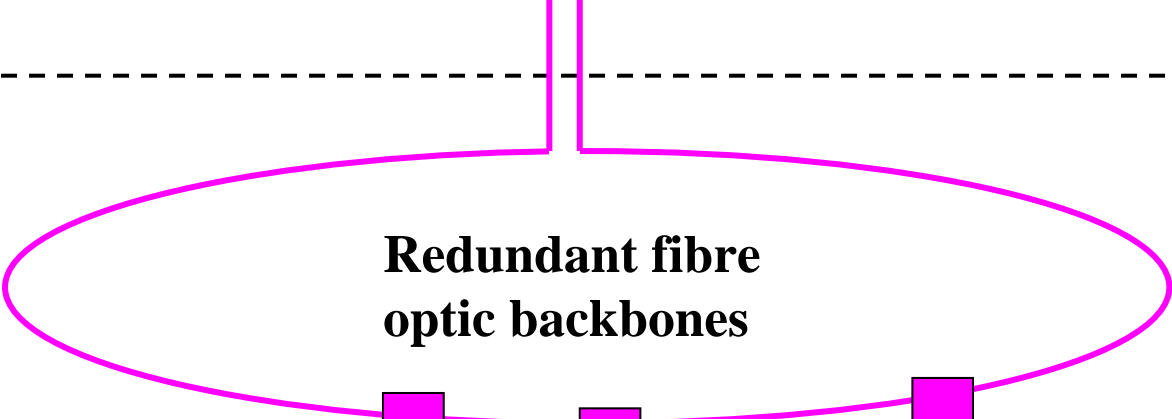


# Automation



Übertage

Untertage



**Redundant fibre optic backbones**

**Fast Ethernet 100MBit /s**



Industrial Ethernet Switches



**Profibus DP Fieldbus 12 Mbaud via fibre**

Fast Ethernet 100MBit /s

# M2



**Profibus DP Fieldbus 12 Mbaud via fibre**

Fast Ethernet 100MBit /s

