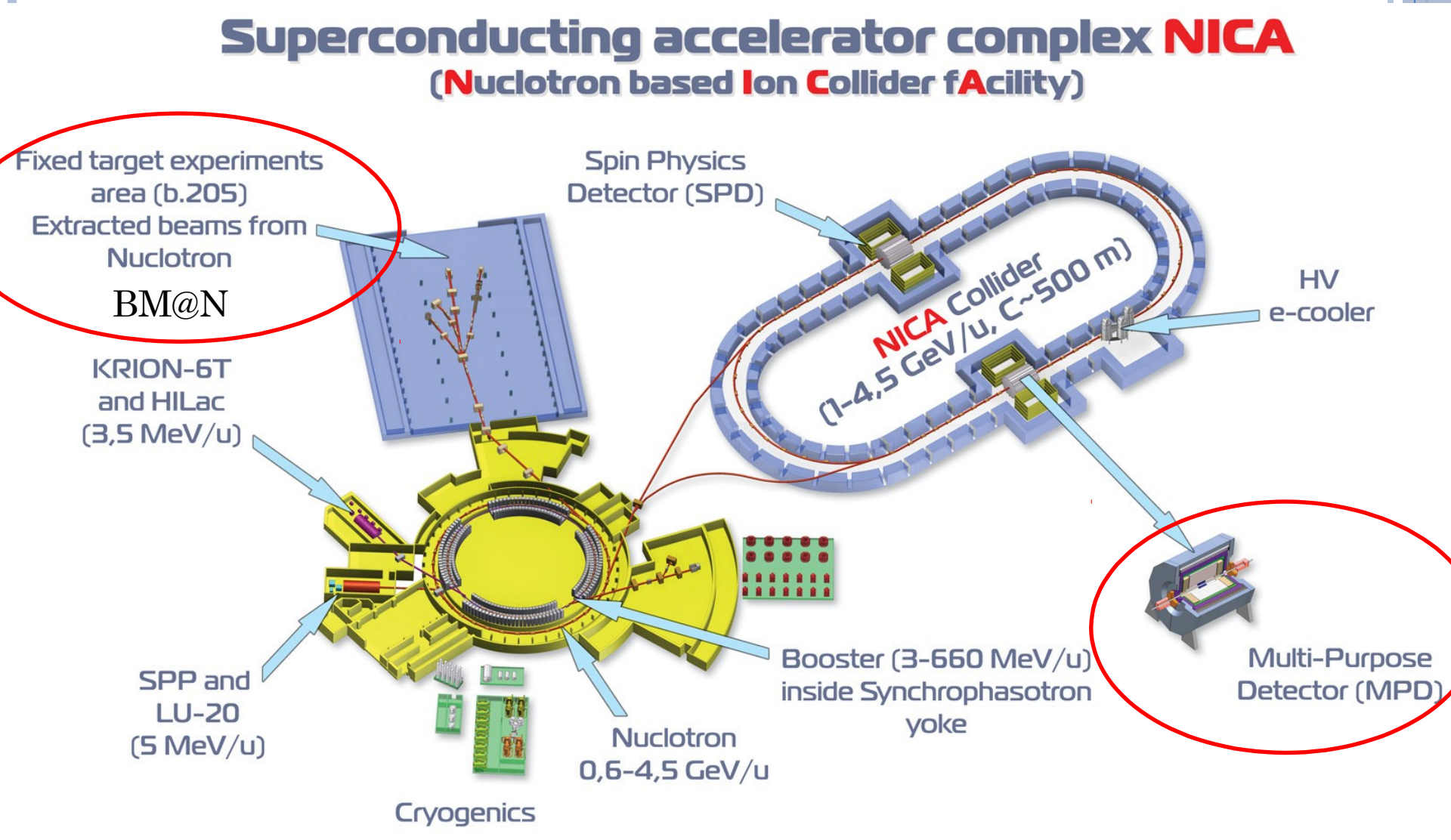
NICA DAYS 2015

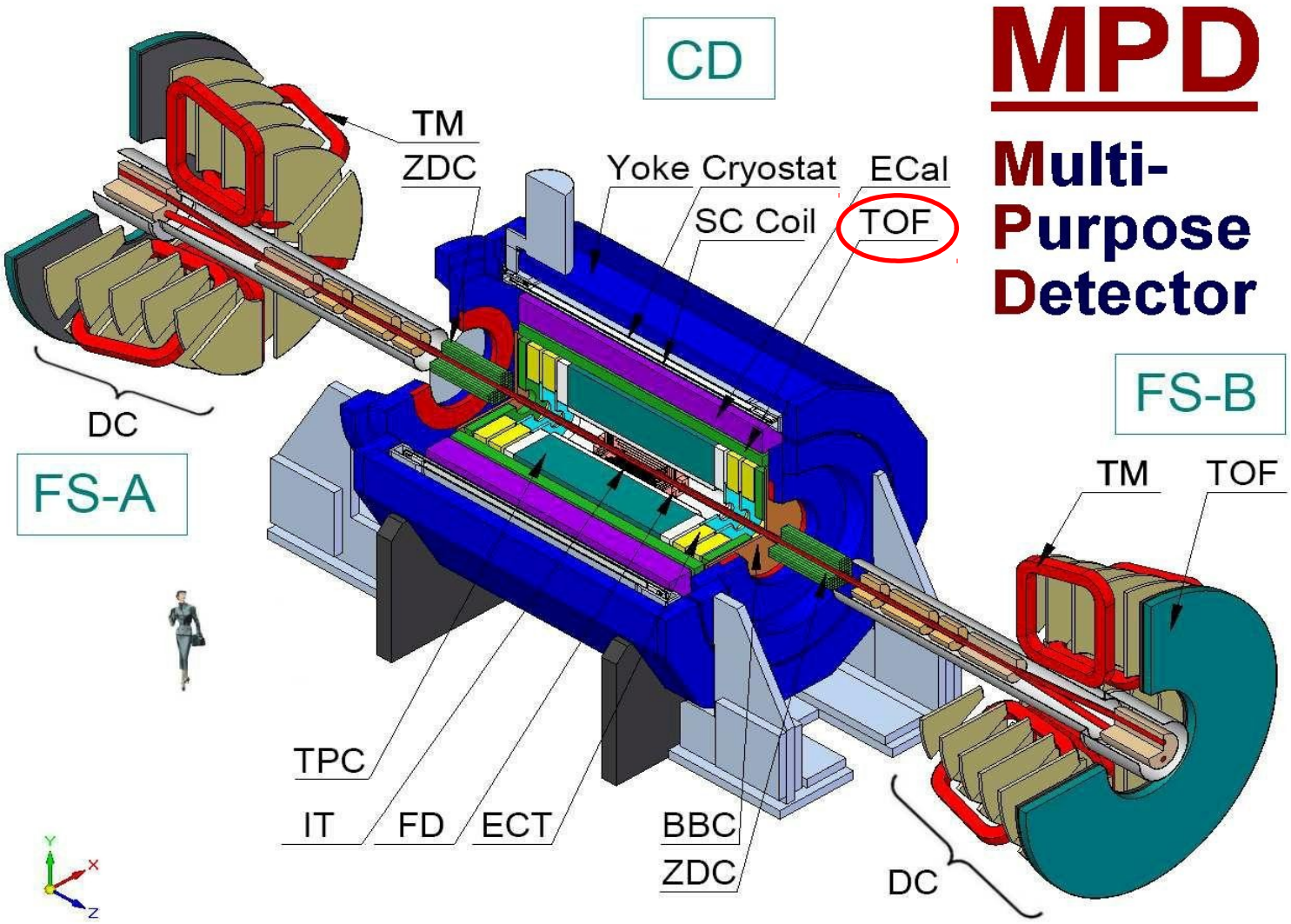
Monitoring network Connecticut using RFID technology in Slow Control system

Warszawa, 07.10.2015

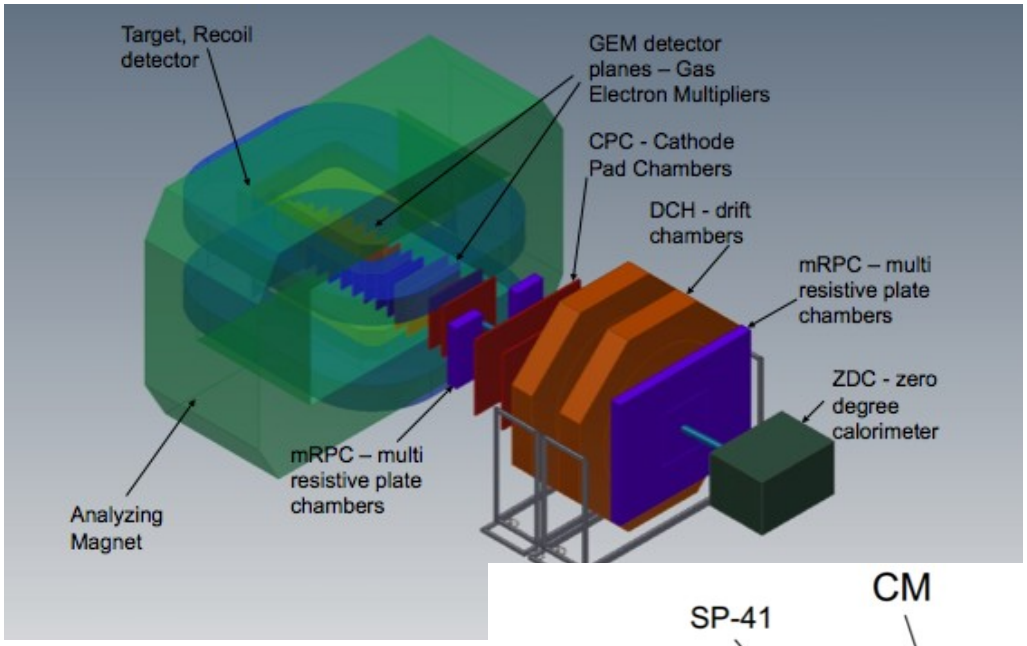
NICA
NUCLOTRON-BASED ION COLLIDER FACILITY

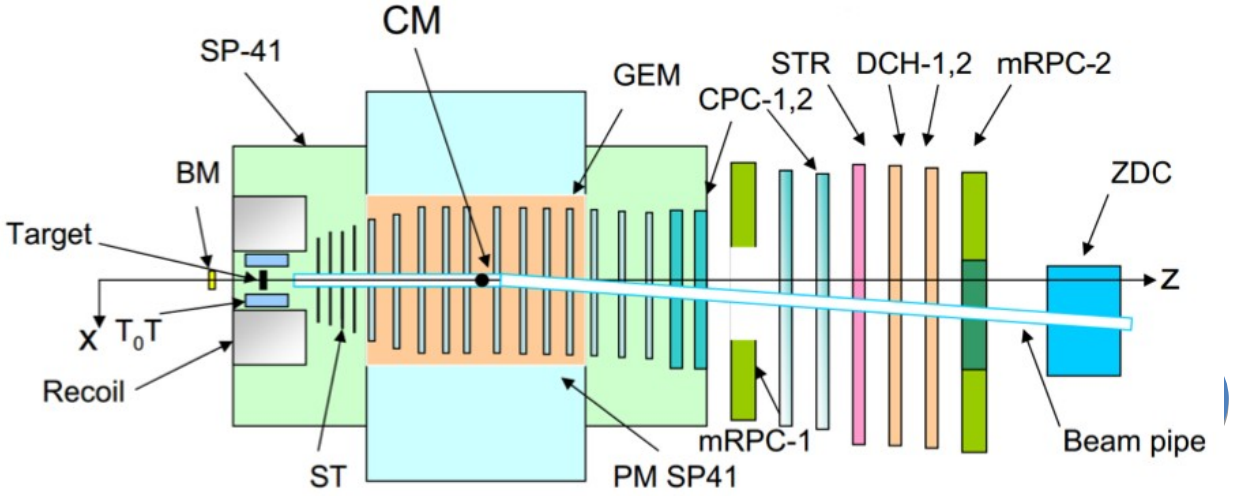


MPD
MULTI PURPOSE DETECTOR



BM@N
BARYONIC MATTER AT NUCLOTRON





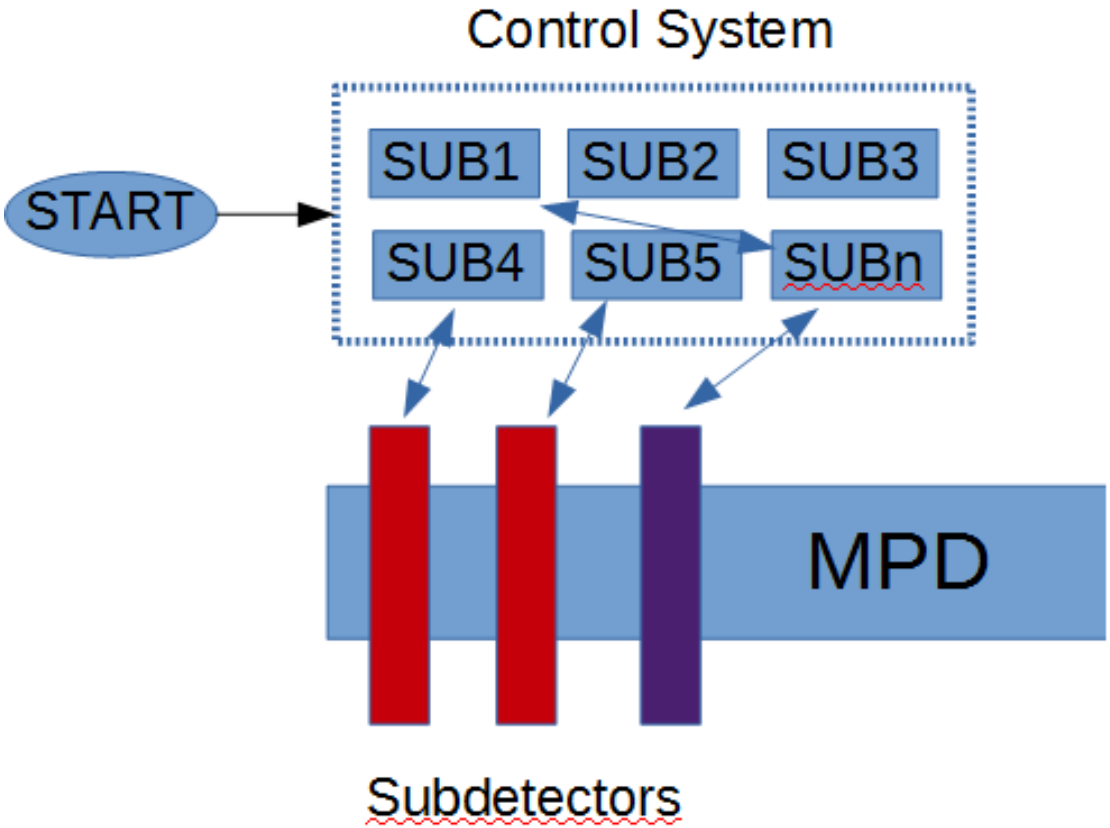
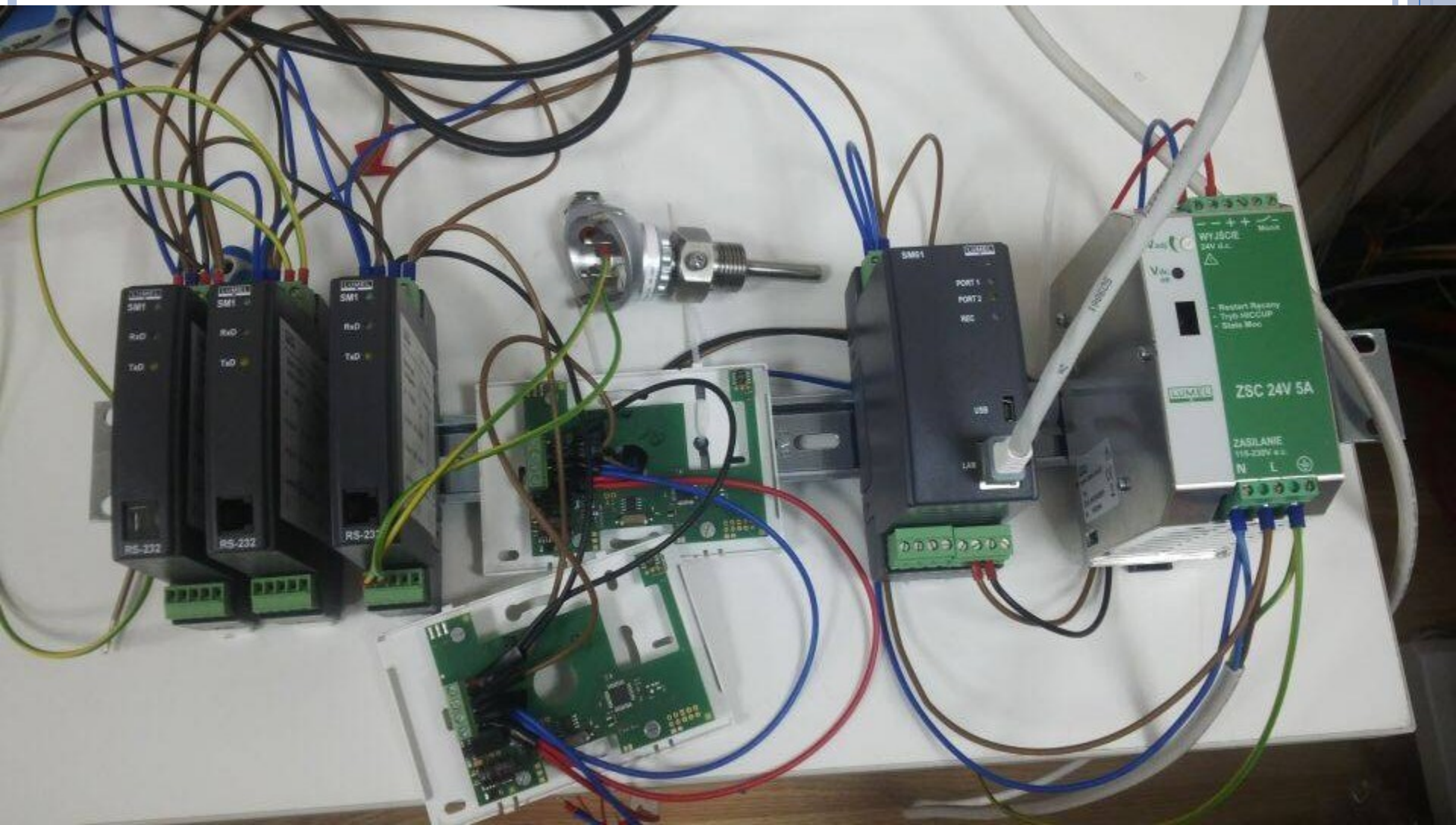
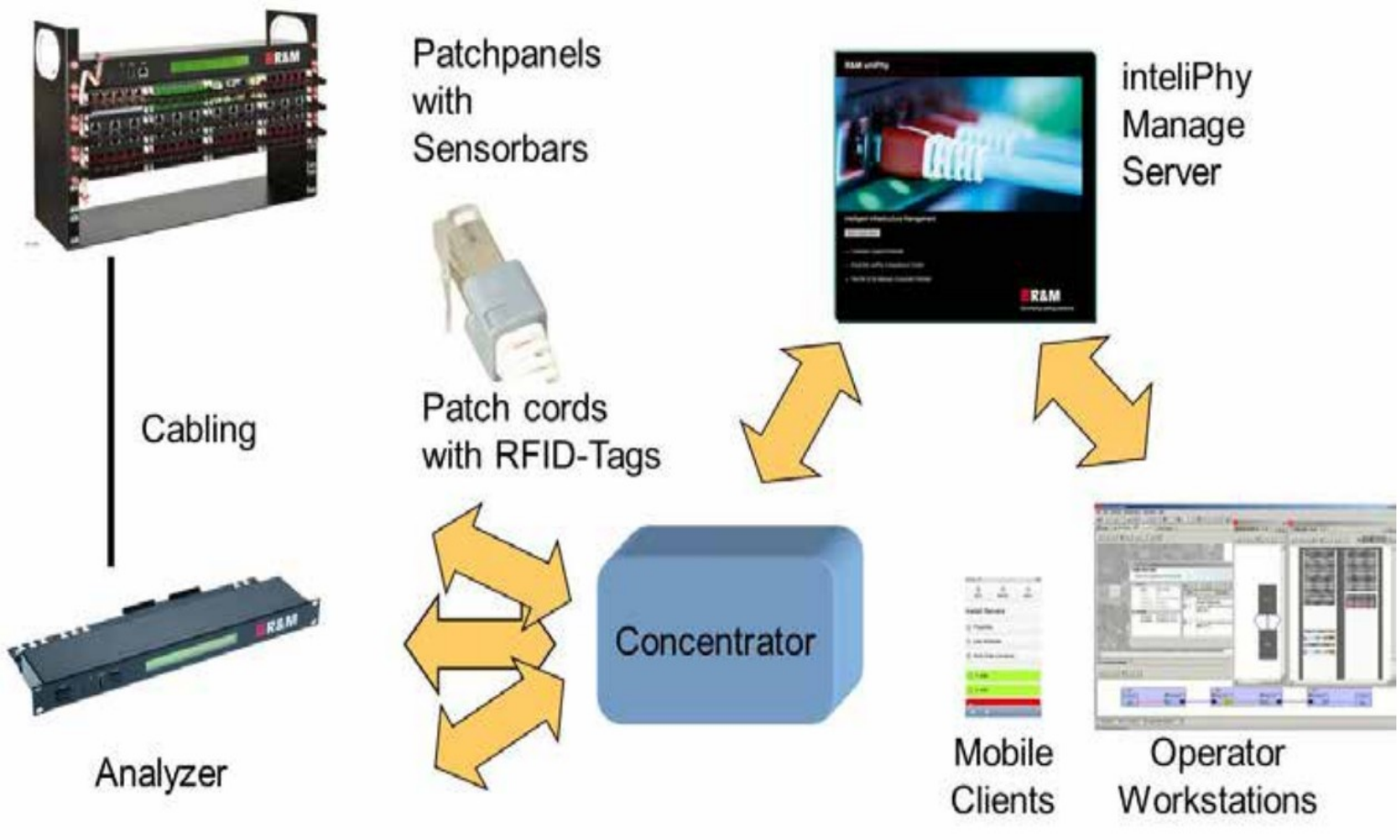

Control System
SUB1
SUB2
SUB3
START
SUB4
SUB5
SUBn
MPD
Subdetectors

PHOTO OF THE REAL MEASUREMENT STAND

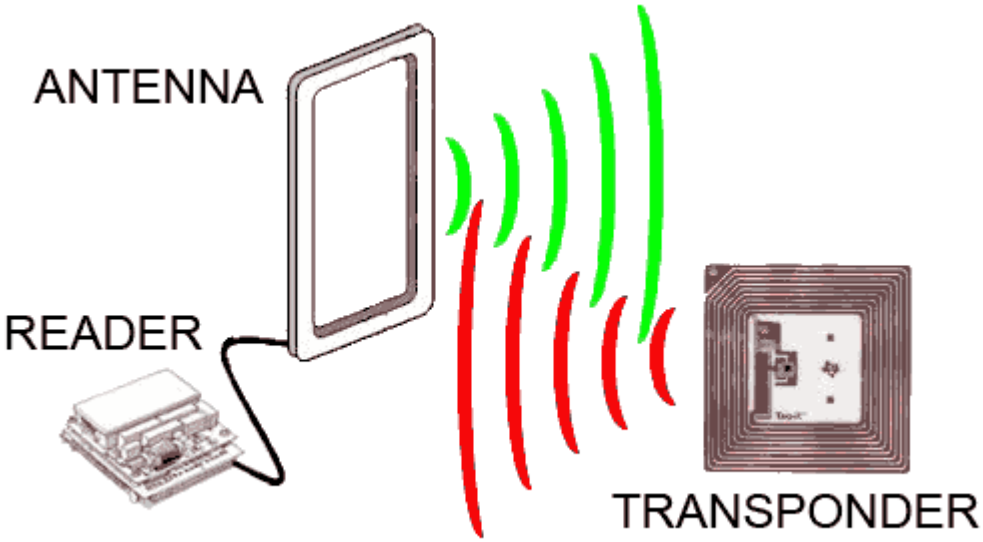


R&MINTELIPHY
INTELLIGENT PHYSICAL NETWORK MANAGEMENT

R&M
Convincing cabling solutions

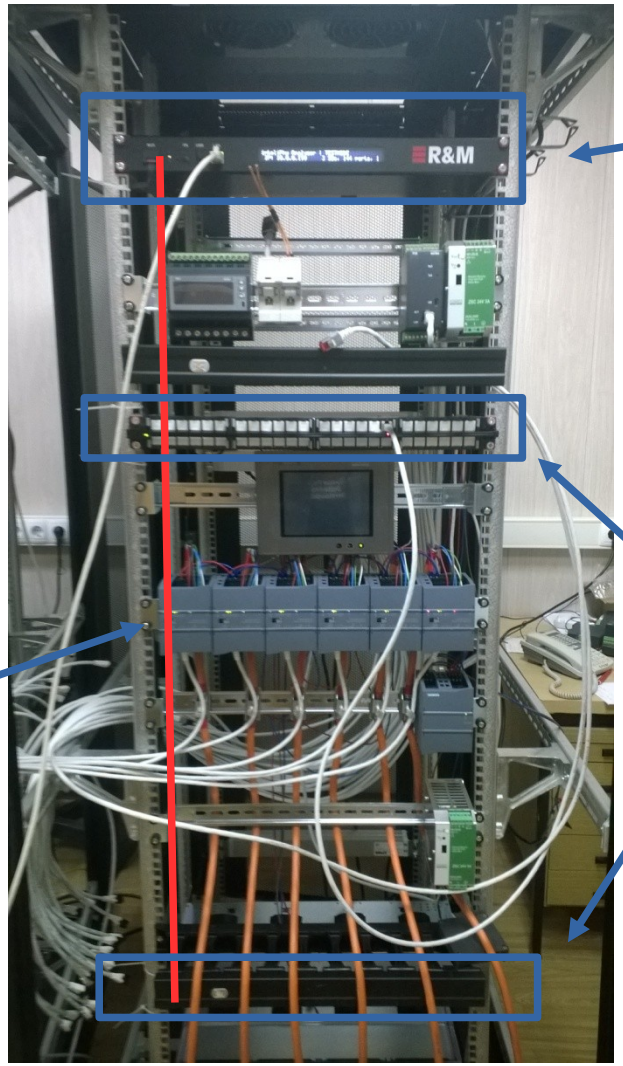

Patchpanels
with
Sensorbars
inteliPhy
Manage
Server
Cabling
Patch cords
with RFID-Tags
Concentrator
Analyzer
Mobile
Clients
Operator
Workstations

RFID
RADIO-FREQUENCY IDENTIFICATION



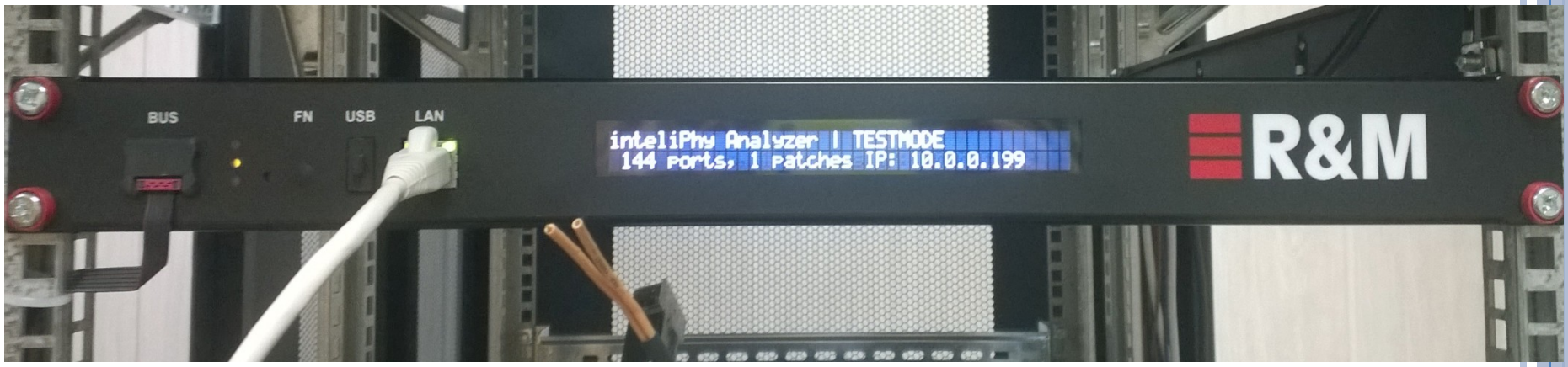
RFID is the wireless use of electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects.

CONNECTION MANAGMENT FOR SLOW CONTROL



- Analyzer
- Bus
- Sensobars

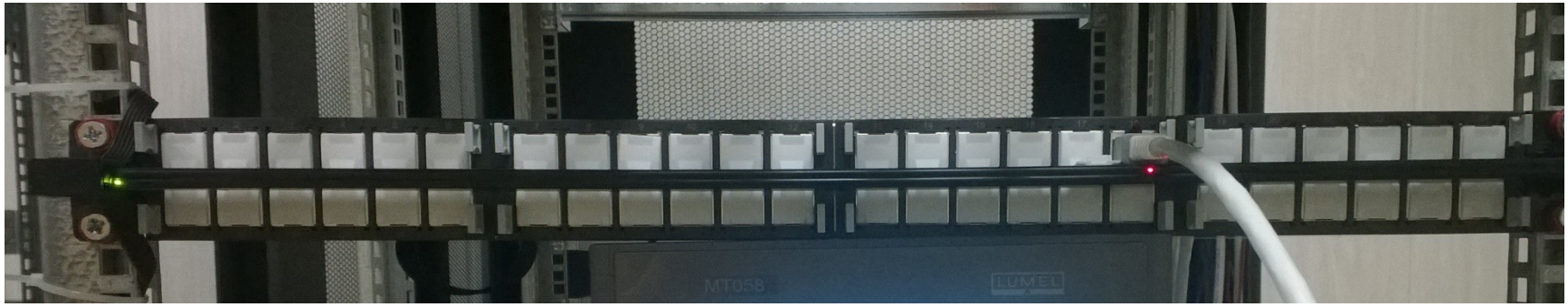
ANALYZER



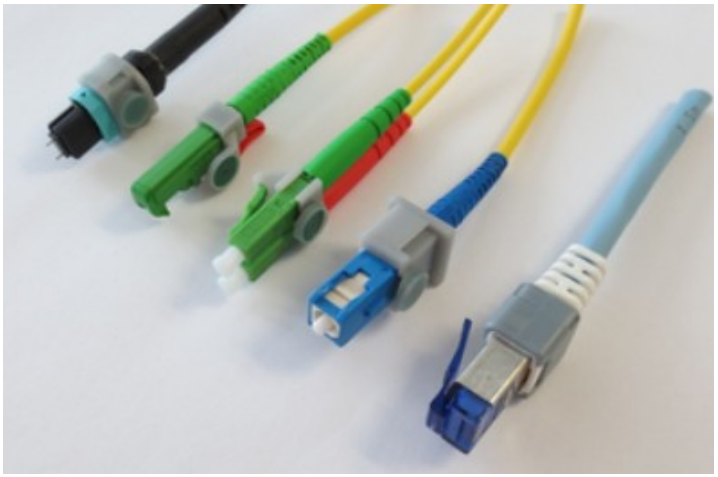
TEST MODE :

- number of RFID port supported (three sensobars – 48 ports on 1U)
- number of active connection (1 patches)
- Device IP address (default is 10.0.0.199)

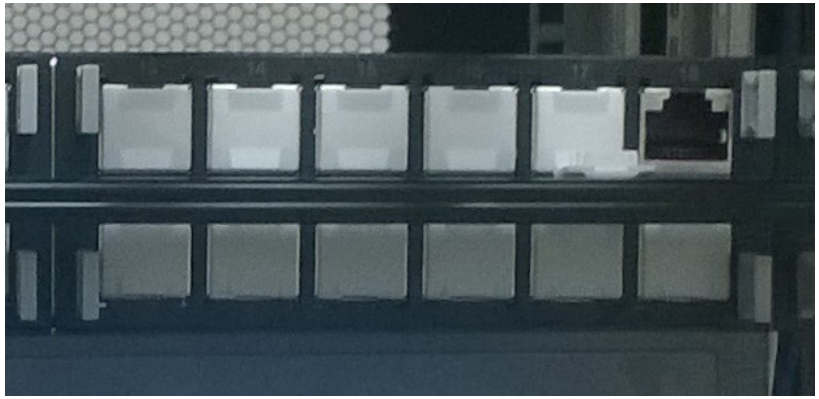
SENSOBAR

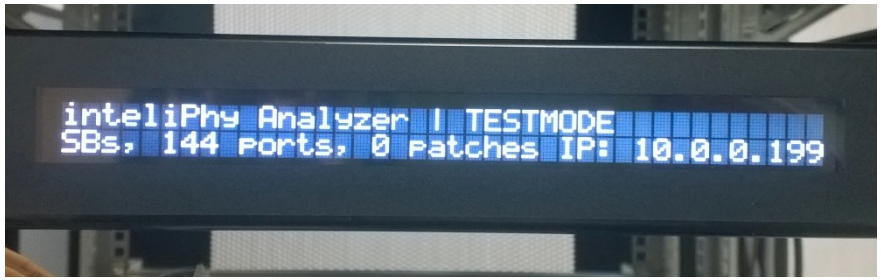


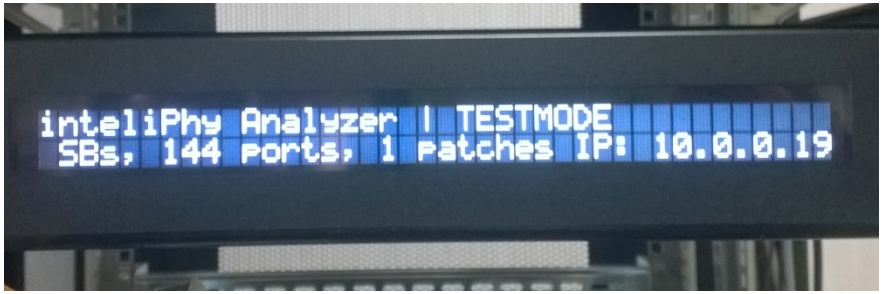
- The system supports multiple types of connections (RJ45, LC, SC, E2000, MPO), simply attach an RFID tag to the plug.
- Every RFID tag has a unique id.



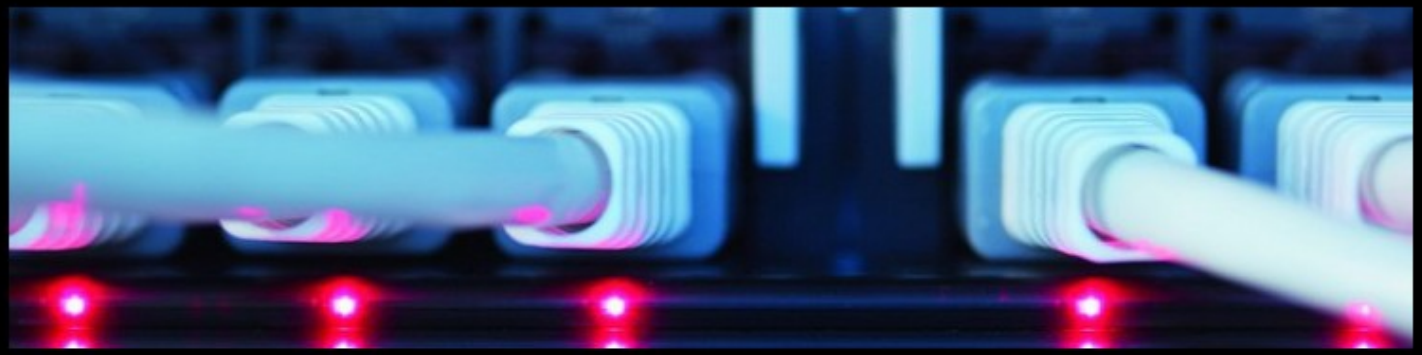
THE TEST OF CONTROL SYSTEM INTELIPHY







R&M*inteliPhy* Analyzer



- Analyzer
- Sensorbar
- Network
- Snmp
- Password
- Logout

Sensorbar Configuration

Idx	SB Serial	FW Version	HW Revision	Ports	Patched	LED on/off	Rack ID	Rack HU
1	1072111306240008	"2012"	"0104"	48	0	○ ◉	1	1
2	1072111306250064	"2012"	"0104"	48	0	○ ◉	1	1
3	1072111306240007	"2012"	"0104"	48	0	○ ◉	1	1

Clear All | Save Changes

R&M

PLANNED EXPANSION OF THE SYSTEM

- Network connection with twin system in WUT
- Management via software supplied from R&M.
- Integrate the system with global database of experiment.

RACKS

THANK YOU FOR YOUR ATTENTION!

And many thanks to the Organizers!