

## **Controllers - PID**



This laboratory is designed to study and to analyze the characteristics and the typical behaviors of the controllers: linearity, proportionality, dynamic behavior, gain, conventional values, critical frequency, phase, etc. After having analyzed the single P, I and D elements, students is able to study their PI, PD and PID combinations and he can set series parallel configurations. uр both and The knowledge of the typical characteristics of the controllers is extremely important for a correct approach to the design of the control systems.

This trainer has a modular structure and it consists of didactic panels installed on a vertical frame. It is supplied with a theoretical and practical manual. The modularity of this didactic system can give the students a direct and immediate approach to the topics, offering the opportunity to study various subjects, performing several experiments as following:

- P Controller
- I Controller
- D Controller
- PI Controller
- PD Controller
- PID Controller
- PID controller with gain and offset regulation



## **AUTOMATIC CONTROL TECHNOLOGY**



## List of modules for experiments:

		MODULES												
		2613	2670	2671	2672	2674	2678	2625	2687	PS-MODE	DL ACTSW	1893	115ACT	2100-3M
No	EXPERIMENT	DL 2	DL 2	DL 2	DL 2	DL 2	DL 2	DL 2	DL 2	DL P	DL A	DL 1	DL 1	DL 2
1	Controller P	1	1						1		1	1	1	1
2	Controller I	1		1					1		1	1	1	1
3	Controller D	1			1				1		1	1	1	1
4	Controller PI	1	1	1		1			1		1	1	1	1
5	Controller PD	1	1		1	1	1		1	1	1	1	1	1
6	Controller PID	1	1	1	1	1			1		1	1	1	1
7	PID controller with gain and offset regulation	1	1	1	1	1		1	1		1	1		
8	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	1