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# P-SYS-MODAL<sup>®</sup>

## Multi-Channel Excitation and Acquisition System for Modal Analysis

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**P-SYS-MODAL<sup>®</sup>**, PRODERA's most recent developed system for Modal Analysis is optimised to operate with **P-WIN-MODAL<sup>®</sup>**, PRODERA Modal Analysis software.



**P-SYS-MODAL<sup>®</sup> with manual control unit**

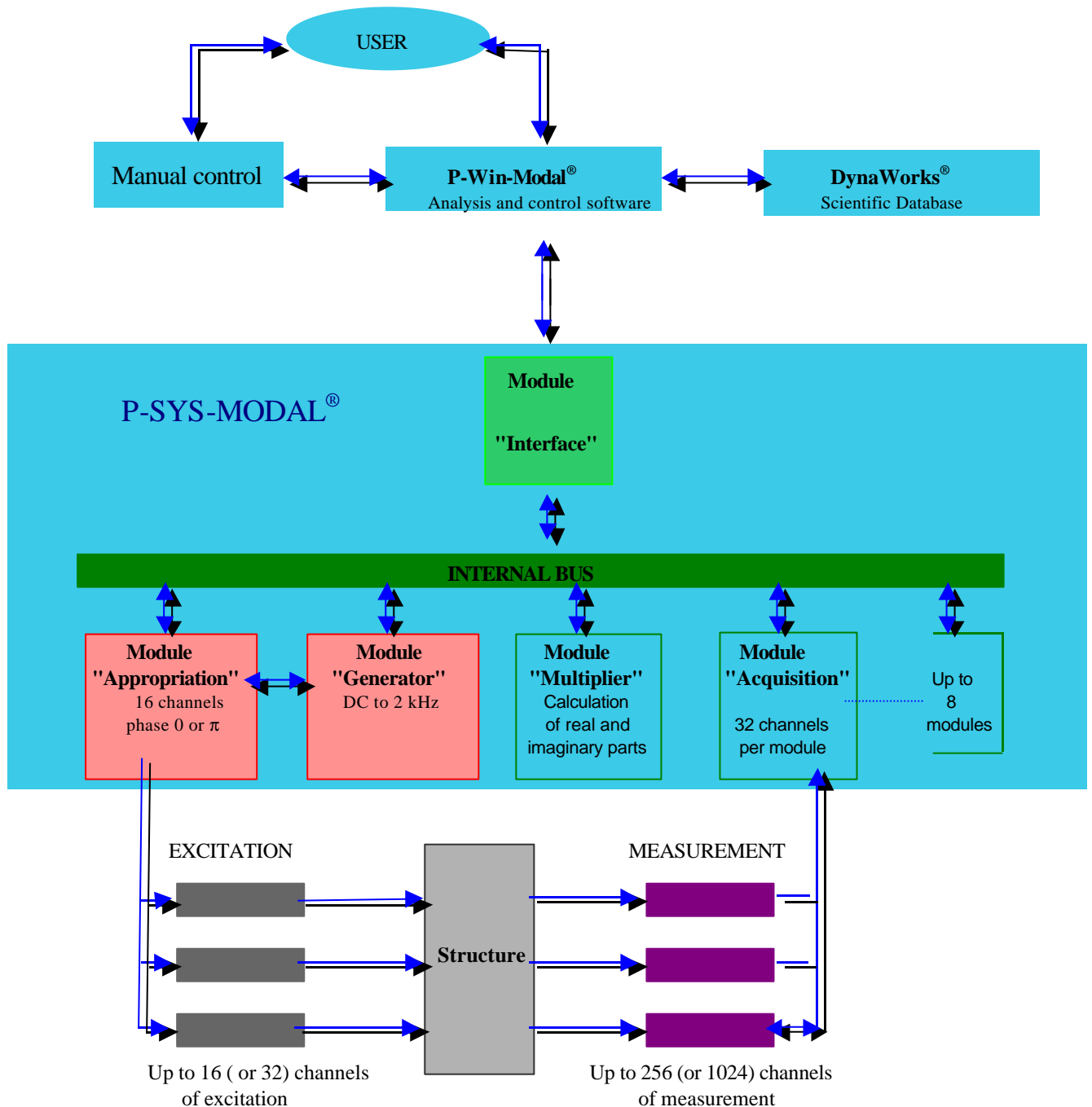
**P-SYS-MODAL<sup>®</sup>**, located in a compact 7 U rack, allows the force control of 16 or 32 channels of excitation as well as the acquisition of 256 channels of measurement up to a maximum of 1024 channels. **P-SYS-MODAL<sup>®</sup>** is supplied in a rack with casters to make easy both the transportation and the installation.

### Composition

- **Module "Generator"**
  - Frequency range :  
0 - 2 000 Hz
  - Stability :  
frequency :  $10^{-8}$   
amplitude :  $5 \cdot 10^{-3}$
  - Signals :  
sine, random and impulse
- **Module "Appropriation"**
  - 16 channels (32 channels max.)
  - Output voltage :  $\pm 5$  V peak  
on 2 000 points
  - Phase : 0 or  $\pi$
- **Module "Digital multiplier"**
  - Real part of the transducer signal: 0 - 5 V peak
  - Imaginary part of the transducer signal: 0 - 5 V peak
  - Real time mode shape visualisation
- **Module "Acquisition"**
  - 32 channels (256 channels per rack, 1024 channels max.)
  - Input sensitivity : 5 V max.

### Specifications

- Power supply : 220 V  $\pm$  10 % 50 Hz  
or 115 V  $\pm$  10 % 60 Hz
- Weight: 15 kg.
- Dimensions of the rack:  
standard 19", 7 U, width: 480 mm



## Calculated results:

- Stabilisation time of structure
- Identification of resonance frequencies
- Generalised mass, stiffness and damping
- Temporary responses
- FRF acquisition

## Interfaces:

- Direct link to DynaWorks®
- Direct link to Structural Dynamics Toolbox
- UFF import/export functions (blocks 15, 55, 58, 82)
- FemTools

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