

| PROFIBUS COMPETENCY CENTRE, AUSTRALIA TECHNICAL SERIES | | |
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| SUBJECT: OSI MODEL | | |

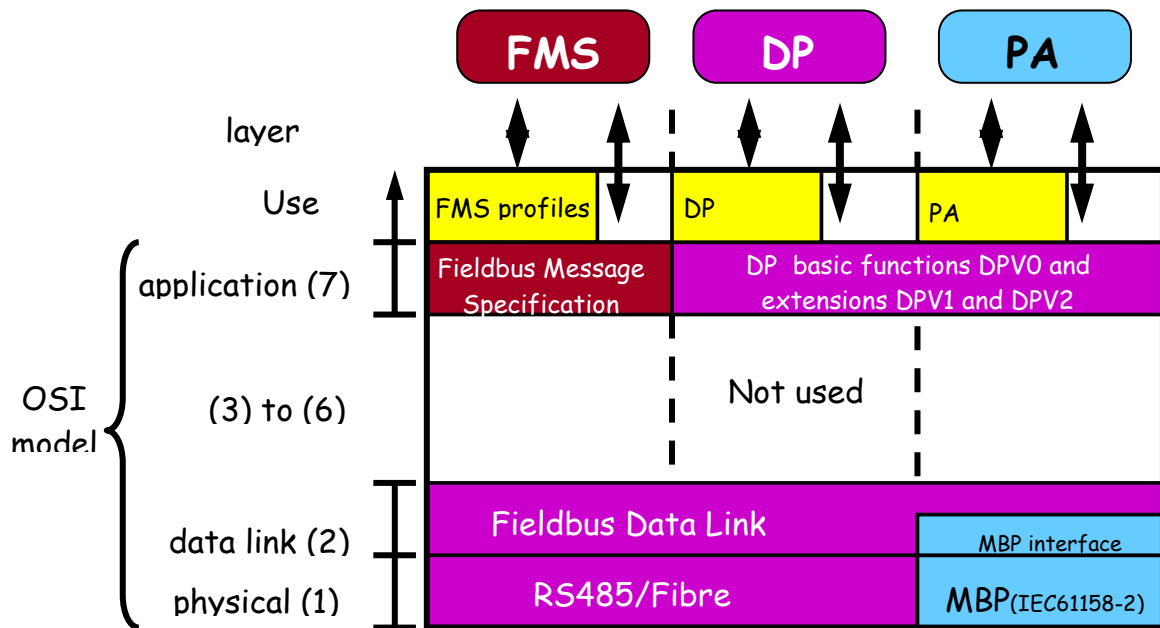


Fig. 1 The OSI Model

The “Open System Interconnect” model is used to compare communication systems. This model separates the protocol into 7 layers. Profibus only uses layers 1,2 & 7

Layer 1; Mechanical and electrical connection for data transmission

Layer 2; Data structure, telegram format, security mechanisms and error handling

Layer 7; Providing the Network Service to the user

The 3 different Profibus Protocols are shown in the above model. FMS is shown for historical purposes, although still in use it is no longer supported. DP (Decentralised Periphery) is largely used for fast data exchange in Factory automation. PA (Process Automation) provides a system for processes/field instrumentation.

References:

ⁱ CPIC Presentation L02 Verwer Training & Consultancy Ltd.
The New and Rapid Way to PROFIBUS DP, Manfred Popp

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