# EduTrainer® Universal preferred versions Laboratory: A4/A4 rack with SIMATIC® S7-1500 and 19" simulation modules



# The ultimate in power and efficiency

The SIMATIC S7-1500 controller family represents the new controller generation in the TIA portal and a milestone in automation. It delivers maximum performance and user-friendliness for medium and high-end applications in machine and plant automation.

#### EduTrainer® Universal with:

# CPU S7-1512C-1PN

- Main memory: 250 KB for program and 1 MB for data
- · Memory card included
- Interface: PROFINET IRT with 2-port switch Inputs/outputs:
- 32 digital inputs (24 V DC)
- 32 digital outputs (24 V DC/0.5A)
- 5x analog inputs, 4 x U/I, 1 x R/RTD, 16-bit resolution
- 2x analog outputs, 2 x U/I, 16-bit resolution

#### CPU S7-1516-3PN/DP

- Main memory: 1 MB for program and 5 MB for data
- Memory card included
- Interface 1: PROFINET IRT with 2-port switch
- Interface 2: Ethernet
- Interface 3: PROFIBUS, 10 ns bit performance Inputs/outputs:

- 32 digital inputs (24 V DC)
- 32 digital outputs (24 V DC/0.5A)
- 8x analog inputs, 8 x U/I/RTD/TC, 16-bit resolution
- 4x analog outputs, 4 x U/I, 16-bit resolution

#### CPU S7-1516F-3PN/DP

- Main memory: 1.5 MB for program and 5 MB for data
- · Memory card included
- Interface 1: PROFINET IRT with 2 port switch
- Interface 2: Ethernet
- Interface 3: PROFIBUS, 10 ns bit performance Inputs/outputs:
- 32 digital inputs (24 V DC)
- 32 digital outputs (24 V DC/0.5 A)
- 8x analog inputs, 8 x U/I/RTD/TC, 16-bit resolution
- 4x analog outputs, 4 x U/I, 16-bit resolution

#### The mounting system

- EduTrainer® Universal, size 1 (W x H) 305 mm x 300 mm
- Can be placed on a desk or in an MPS® station
- Stable, powder-coated, sheet-steel mounting system
- Integrated power supply unit, AC 110/230 V/DC 24 V, 4 A
- 19" module 16DIN (12 HP), 16 digital inputs on 4 mm safety sockets and 16 switches/pushbuttons for signal simulation
- 19" module 16DOUT (12 HP), 16 digital outputs on 4 mm safety sockets
- 19" module 4AIN/2AOUT (12 HP), analog processing 4 analog inputs on 4 mm safety sockets can be switched to simulation via potentiometer and 2 analog outputs on 4 mm safety sockets
- 19" module 24 V/0 V (9 HP), 8 x 4 mm safety sockets, red for 24 V distribution, 8 x 4 mm safety sockets, blue for 0 V distribution
- 19" module simulation plate with 2x SysLink plug connector for MPS® station and control panel, each with 8 digital inputs and 8 digital outputs and 1x Sub-D 15-pin plug connector with 4 analog inputs and 2 analog outputs; emergency stop jumper to connect a safety circuit for disconnecting 8 digital outputs.

  Special license rules apply for schools and educational institutes in the commercial sector.

# Notes

Order no. 8065595, 8042524 and 8034574 are based on Siemens SCE Trainer Packages and each one contains one EduTrainer® including programming cable (Ethernet cable) and programming software STEP 7 TIA portal. When Siemens updates these Trainer Packages, the controllers are replaced by successor models. Subject to technical implementation.

### Recommendations for accessories, media and extensions

- I/O data cable with SysLink connectors (IEEE 488) (Order no. 34031)
- Analog cable, parallel (Order no. 529141)
- Safety laboratory cable, 3 m (Order no. 571817)
- IEC power cable 90°
- Analog cable, crossover (Order no. 533039)