



# TC1000 | TC3 ADS

The Automation Device Specification (ADS) is the communication protocol of TwinCAT. It enables the data exchange and the control of TwinCAT systems. ADS is media-independent and can communicate via serial or network connections.

ADS enables:

- access to the process image
- consistent data exchange
- access to I/O tasks
- detection of status changes
- read-out of the PLC symbol information
- access by variable name
- sum commands
- synchronous and asynchronous access
- cyclic and event-based messages

Libraries and runtime components are provided for common programming languages (including .NET, C/C++, Delphi and Java). In addition, interfaces are provided for communication with third-party software (e.g. MATLAB®, NI LabView, Office). The ADS web services enable the development of device-independent web applications (HTML5, WCF).

The message router manages multiple connections and efficiently distributes the messages. The data packets can be recorded via the ADS monitor using the integrated diagnostic interface.

The free TC3 ADS supplies the basic components required in order to communicate with TwinCAT systems. The setup can be integrated in your own installation routines.

<b>Technical data</b>	<b>TC1000</b>
Target system	Windows 7/8/10, Windows CE

Ordering information	
TC1000-0v20	TC3 ADS, platform 20 (Economy)
TC1000-0v30	TC3 ADS, platform 30 (Economy Plus)
TC1000-0v40	TC3 ADS, platform 40 (Performance)
TC1000-0v50	TC3 ADS, platform 50 (Performance Plus)
TC1000-0v60	TC3 ADS, platform 60 (Mid Performance)
TC1000-0v70	TC3 ADS, platform 70 (High Performance)
TC1000-0v80	TC3 ADS, platform 80 (Very High Performance)
TC1000-0v81	TC3 ADS, platform 81 (Many-core 5...8 Cores)
TC1000-0v82	TC3 ADS, platform 82 (Many-core 9...16 Cores)
TC1000-0v83	TC3 ADS, platform 83 (Many-core 17...32 Cores)
TC1000-0v84	TC3 ADS, platform 84 (Many-core 33...64 Cores)
TC1000-0v90	TC3 ADS, platform 90 (Other)
TC1000-0v91	TC3 ADS, platform 91 (Other 5...8 Cores)
TC1000-0v92	TC3 ADS, platform 92 (Other 9...16 Cores)
TC1000-0v93	TC3 ADS, platform 93 (Other 17...32 Cores)
TC1000-0v94	TC3 ADS, platform 94 (Other 33...64 Cores)