TwinCAT 3 Base

# 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.

| Technical data | TC1000 |
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| Target system | Windows XP, Windows 7/8/10, Windows CE |

| Ordering information | |
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| TC1000-0020 | TC3 ADS, platform 20 (Economy) |
| TC1000-0030 | TC3 ADS, platform 30 (Economy Plus) |
| TC1000-0040 | TC3 ADS, platform 40 (Performance) |
| TC1000-0050 | TC3 ADS, platform 50 (Performance Plus) |
| TC1000-0060 | TC3 ADS, platform 60 (Mid Performance) |
| TC1000-0070 | TC3 ADS, platform 70 (High Performance) |
| TC1000-0080 | TC3 ADS, platform 80 (Very High Performance) |
| TC1000-0081 | TC3 ADS, platform 81 (Many-core 5…8 cores) |
| TC1000-0082 | TC3 ADS, platform 82 (Many-core 9…16 cores) |
| TC1000-0083 | TC3 ADS, platform 83 (Many-core 17…32 cores) |
| TC1000-0084 | TC3 ADS, platform 84 (Many-core 33…64 cores) |
| TC1000-0090 | TC3 ADS, platform 90 (Other) |
| TC1000-0091 | TC3 ADS, platform 91 (Other 5…8 cores) |
| TC1000-0092 | TC3 ADS, platform 92 (Other 9…16 cores) |
| TC1000-0093 | TC3 ADS, platform 93 (Other 17…32 cores) |
| TC1000-0094 | TC3 ADS, platform 94 (Other 33…64 cores) |