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Data Sheet 5.85-41/1

# Temperature Data Acquisition Device, Type TiDAS 32

**Application**

The Temperature Data Acquisition Device (TiDAS) is a scalable, high performance temperature data acquisition platform designed for harsh operating conditions. The temperature measurements are carried out with distributed sensors.

**Description**

The TiDAS device mainly consists of a control unit and a scalable number of measurement modules. The control unit is mounted into an auxiliary control cabinet and is used for the data collection and communication. The measurement modules can collect data of up to 30 channels.

TiDAS devices can be cascaded via Ethernet and are controlled by the HIGHVOLT software package HV Suite® Test Bay Commander.

**Advantages**

Ethernet connection allows the convenient and reliable remote control of the device and the transfer of the measured data. Additionally Ethernet allows measurements with long cables and distributed infrastructure.

**Type designation**

The type designation depends on the design types and the main parameters as follows:  
TiDAS32-a (a = number of temperature channels)

Table 1: Technical Data

Technical Data	unit	Type TiDAS 32
<b>Input</b>		
Sensor Type		4wire RTD (Pt100)
Number of channels		4 to 30
<b>Performance</b>		
Measurement range	°C	0 to 120
Accuracy	K	±0.5 ( @25°C operating temperature)
Resolution	bit	≥16
Sample rate per channel	S/s	1 (high resolution)
<b>Features</b>		
Interface		Ethernet TCP/IP
<b>Normal operating conditions</b>		
Rated power supply voltage	V(AC)	100 to 240
Power supply frequency	Hz	50 to 60
Maximum required input power	W	60
<b>Environmental conditions</b>		
Temperature	°C	-10 to 45
Humidity	%r.H.	10 to 90, non condensing
Altitude	m	<2000
Ingress protection		IP20
<b>Accessories</b>		
Set of MTP-DIP25/35 temperature probes		according to number of channels
Power cord		1
<b>Optional Accessories</b>		
Temperature probe MTP-DIP 25/35		
Type		RTD
Test lead length	m	25
Temperature probe MTP-SFC 15/21		
Type		RTD
Test lead length	m	15
Test lead extension (one channel)	m	10