DASIM Uni2

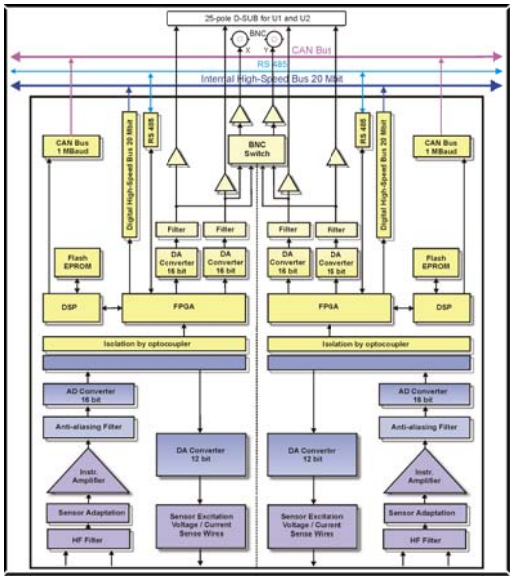
Characteristics

The ***DASIM Universal Amplifier*** offers computer-controlled signal conditioning of manifold sensors. It has 1 DSP per channel. Signal output is with high precision via analog outputs and digitally via Ethernet and CAN. Parameter setting is done with the software DaSoft. Signal filtering can be configured from 3..3000 resp. 6..6000 Hz at 20 resp. 40 kS/s sample rate.

Technical Data

General	Accuracy	see sensors
	Channels/unit	2, isolated
	Sample rate	20 kHz / 40 kHz
	Band width	5 kHz / max. 15 kHz (analog sensors)
	Analog output	± 10 V / 12 mA (short proof) 2 outputs/channel 16 bit resolution
	Digital output	SPI (internal), CAN
	Input protection	± 100 V, ESD IEC 1000-4-2
	Supply voltage	+15 V / 65 mA -15 V / 60 mA +5 V / 320 mA
	Environmental temperature	0..+50 °C
Strain gauge bridges	Range	0.5, 1, 2, 4, 5, 10, 25, 50 mV/V
	Accuracy	± 0.03 %
	Sensor supply	0.5, 1, 2.5, 5 V > 120 Ω, 10 V > 350 Ω
	Type of bridge	full bridge, half bridge, (quarter bridge) min. 120 Ω
Voltage, tacho-meters	Range	0.5, 1, 2, 5, 10, 20, 50, 100 V
	max. input voltage	100 V
	Accuracy	± 0.03 %
Shunt sensors	Range	37.5, 75, 150, 300, 600 mV
	Accuracy	± 0.03 %
Signal current with VV module	Range	± 20 mA, 4..20 mA
	Accuracy	± 0.1 %
Potentiometer	Range	6.25, 12.5, 25, 50, 100%
	Accuracy	± 0.03 %
	Connection	Automatic 3 / 5-wire switch
Thermo-couples J,K, CJC external	Range	-100 to +100, +200, +500, +1000 (1200) °C
	Accuracy	± 0.1 %
Pt100	Range	-100 to +100, +200, +500, +1000 °C
	Accuracy	± 0.1 %
ICP® sensors with VV module	min. input frequency	ca. 2 Hz
	Accuracy	± 0.1 %
	Sensor supply	4 mA, 24 V
Frequency analog	Range	0.1, 0.2, 0.5, 1, 2, 5, 10, 20 kHz
	Accuracy	± 0.03 %
	Input voltage	± 0.05..100 V
	Sensor supply	5 V (50 mA), 15 V, ± 15 V (250 mA, not isolated)
Frequency digital	Range	5, 10, 20, 50, 100, 200, 500 Hz, 1, 2, 5, 10, 20, 50, 100, 200, 500 kHz
	Accuracy	± 0.03 %
	Input voltage	TTL / CMOS
	Sensor supply	5 V (50 mA), 15 V, ± 15 V (250 mA, not isolated)
Torquemeter, Telemetry	Range	10 kHz ± 5 kHz, 100 kHz ± 45 kHz
	Accuracy	± 0.03 %
	Input voltage	TTL / CMOS
	Sensor supply	5 V (50 mA), 15 V (250 mA, n.i.)
Incremental encoder, half bridge	Range	variable, set by no. of pulses
	Accuracy	± 0.03 %
	Input voltage	TTL / CMOS
	Sensor supply	5 V (50 mA), 15 V, ± 15 V (250 mA, not isolated)
	Direction sense/Sync	without, static, dynamic / with sync, without sync
PWM sensors	Range	100 Hz, 1 kHz, 10 kHz
	Accuracy	± 0.1 %
	Input voltage	TTL / CMOS

Block Diagram



Dimensions

19“ plug-in unit, 3 U height, 5 U width, depth 160 mm

Ordering Code

DASIM-Uni2 - [ ] - [ ] - [ ]
1. 2. 2.a

1.	**Model**	
	20	20 kHz sample rate
	40	40 kHz sample rate
2.	**Option quarter bridge extension for strain gauge mode**	
	1/4	
2a.	**Option bridge resistance**	
	120	Quarter bridge extension 120 Ω
	350	Quarter bridge extension 350 Ω
	120-350	Quarter bridge extension 120 / 350 Ω switchable