Device Models and Equipment Configurations

		SPARTAN-T	SPARTAN-U
SPARTAN-x [1]-16	Analog inputs	16	16
	Dimensions (W x H x D)	210 x 155 x 246 mm	210 x 155 x 246 mm
	Weight	3.3 kg	3.5 kg
SPARTAN-x [1]-32	Analog inputs	32	32
	Dimensions (W x H x D)	250 x 155 x 246 mm	250 x 155 x 246 mm
	Weight	3.8 kg	4.3 kg
SPARTAN-x [1]-64	Analog inputs	64	64
	Dimensions (W x H x D)	332 x 155 x 246 mm	332 x 155 x 246 mm
	Weight	5.3 kg	5.8 kg
SPARTAN-x [1]-96	Analog inputs	96	96
	Dimensions (W x H x D)	413 x 155 x 246 mm	413 x 155 x 246 mm
	Weight	6.8 kg	7.5 kg
SPARTAN-x [1]-128	Analog inputs	128	128
	Dimensions (W x H x D)	494 x 155 x 246 mm	494 x 155 x 246 mm
	Weight	8.5 kg	9.3 kg
Connection terminals	DSUB-15	✓✓	✓✓
	Thermo-socket [2]	✓ [3]	✓ [3]
	BNC (upon special request)	✓ [4]	✓ [4]
	Differential inputs	✓	✓
	Isolated	✓	✓✓
	Voltage	✓	✓✓
	Current	✓	✓
	Thermocouples	✓✓	✓✓
	PT100	✓	✓
	Max. sampling rate/channel	5 Hz	500 Hz
	Bandwidth	1 Hz	200 Hz
	Input ranges U: I:	±50 mV … ±60 V ±1 mA … ±40 mA	±50 mV … ±60 V ±1 mA … ±40 mA
	Sensor supply	o [5]	o [5]
	CAN-/LIN- interface	o	o
	4 incremental inputs	✓	✓
	16 digital inputs	✓	✓
	8 digital outputs	✓	✓

[1] choice of -T or -U models available
[2] type selectable
[3] only suitable for thermocouple measurement
[4] no temperature measurement possible
[5] constant current supply for PT100 standard

✓✓ = especially suited
✓ = default
o = optional
– = not available

Standard DSUB-15 interconnections

The standard DSUB-15 terminal is very robust and is used throughout to connect signal lines.
The Phoenix screw terminals inside enable any signals and sensors to be quickly connected and thus help provide the full measure of SPARTAN's versatility. Even bare wire signal contacts are easily screwed into a terminal providing strain relief. The connector enclosure has complete metallic coated lining, ensuring optimal shielding.
Special thermo-plug connectors provide the necessary signal conditioning and reference point for all standard thermocouple types.

Open DSUB terminal

Specialized signal connections

The easiest way to achieve custom interconnections used custom-wired DSUB-15 terminals with special cable terminals.

DSUB-15 connector with BNC cable terminals

Customized special connectors

In almost all cases, custom connectors can be used instead of the standard D-SUB-15 or thermo-connectors – e.g. BNC connectors, etc.

Hardware Configuration

Connections	
Analog Inputs	16 - 128, depending on type
Digital Inputs	16
Digital Outputs	8
Incremental / Frequency Counter	4
Decentralized Expansion with imc CANSAS Modules	o
Field Bus Interface	
CAN-/LIN-Bus Interface	o
ECU-Protocols [1]	o
Data storage	
Internal Hard Drive	o
Compact Flash slot for CF-card	✓
Standalone operation, or via PC	✓
Internal data storage, or on PC	✓
Circular Buffer Memory Option	✓
Displays	
Connection for External Display Terminal / GPS [2]	✓
Data Transfer	
Ethernet Interface (TCP/IP)	✓
Wireless LAN	✓
External Modem Connection	o
Radio Clock, Device Synchronization, GPS	
Connection terminal for external DCF77 signal/Sync	✓
Device preparation for GPS-mouse	o
imcDevices Synchronization via Sync-Line	✓
Power Supply	
Supply Voltage	10-36 V DC
Power Adapter 110V / 230V	✓
Battery Buffering, UPS (30 sec buffer time)	✓
Battery operation, approx. 3 - 6 hours [3, 4]	o
Automatic Charging Control	✓
Self-Activation Following Power Outage	✓
Auto Data Saving on Power Outage	✓
Environmental Operating Conditions	
Operating temperature (-10° to 55°C)	✓
Extended temp range: Operating temperature -40° C … 85° C (Condensation allowed)	o

[1] KWP 2000, CCP, XCP, etc.
[2] Connection for Display or GPS
[3] Maximum temperature range - 20° C … 60 ° C
[4] Not available for SPARTAN-x-128

Accessories

Data storage	
Compact Flash memory card	o
Display, control peripherals	
Color display (graphics terminal)	o
Radio clock, device synchronization, GPS	
DCF77 or GPS real time radio clock	o
External GPS receiver (5Hz)	o

Software configuration

Operating software	
Universal applications	
imcDevices	✓
Total parameterization for CANSAS modules	o
ECU protocols for CAN Interface	o
Vector database linkage	o
Online Software options	
Online FAMOS	o
Online FAMOS Professional	o
Online Class-counting package	o
Measurement Data Analysis and Administration	
imc FAMOS signal analysis software	o
imc Sensors sensor database	o
imc LOOK data visualization software	o
Development Environment	
imc COM basic package	o
LabView™ interface, VI's	✓
DIAdem™ interface	✓

✓ = default
o = optional
– = not available