

S-DIAS CPU Unit

CP 731



with 2 Ethernet
2 VARAN
1 CAN
1 USB Device, 1 USB 3.0
1 microSD

The CP 731 is an industrial PC with an Intel Atom E3827 processor. The CPU unit is used to control S-DIAS modules and has various interface connections such as: CAN, Gigabit Ethernet and two VARAN Out interfaces. 14 status LEDs provide information about the CPU status directly on the CPU unit. A microSD card can be used to store program memory. The CP 731 can be operated with 2 independent VARAN Managers.

Performance Data	
Processor	Intel Atom E3827 DualCore
Processor cores	2
Internal cache	1-Mbyte L2 Cache
Addressable I/O/P modules	VARAN bus: 65.280 CAN participants: > 100 S-DIAS bus: 64
Internal I/O	no
Internal program and data memory (DDR3 RAM)	2-GByte DDR3L 1333 MHz
Internal data memory	512-kbyte SRAM (battery buffered)
Internal program memory (microSD)	1 Gbyte (12-630-105, included with delivery)
Interfaces	1x Ethernet1 10/100/1000 1x Ethernet2 10/100 2x VARAN Out (manager) 1x CAN 1x USB 3.0 1x USB Device 2.0 (Micro USB Type B) 1x S-DIAS
Status display	no

Status LEDs	yes
Real-time clock	yes (battery buffered)
Input voltage measurement	yes
Cooling	passive (fanless)

Electrical Requirements

Supply voltage	typically +24 V DC (SELV/PELV)	
	minimum +18 V DC	maximum +30 V DC
Supply voltage (UL)	+18-30 V DC (NEC Class 2 or LVLC)	
Supply voltage current consumption (maximum total current)	maximum 3.0 A at +24 V	
Current consumption without external devices	0.5 A at +24 V	
Inrush current with 24 V/10 A fixed voltage supply	maximum 1.2 A (for 25 ms, load-dependent)	
Inrush current without current-limiting supply	maximum 30 A (for 22.5 µs, load-dependent)	
Available current for S-DIAS (+5 V)	maximum 1.6 A	
Available current for S-DIAS (+24 V)	maximum 1.6 A	
Available current for USB 3.0 (+5 V)	maximum 0.9 A	

Article Number and Miscellaneous

Article number	20-004-731
Operating system	Salamander
Dimensions	40.2 x 147.7 x 193.6 mm (W x H x D)
Project backup	internally on the microSD card

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Ambient temperature	0 ... +55 °C	
Maximum processor temperature	+110 °C (automatic cut-off)	
Humidity	0-95 %, non-condensing	
Operating conditions	pollution degree 2 indoor use altitude up to 2000 m	
EMC resistance	in accordance with EN 61000-6-2 (industrial area)	
EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
Vibration resistance	EN 60068-2-6	3.5 mm from 2-9 Hz 1 g (10 m/s ²) from 9-200 Hz
Shock resistance	EN 60068-2-27	15 g (150 m/s ²) duration 11 ms, 18 shocks
Protection type	EN 60529	IP20

