

Epec 2021 Hub Unit

Epec 2021 Hub Unit is a compact and robust communication and control unit for mobile machines. Small outside dimensions and robust construction with IP67 classification makes installing easy.

Star topology in CAN bus is not often seen in embedded control systems, but with the 2021 Hub Unit it is used to further increase the safety and reliability of the embedded control system. With the help of the hub unit, the system designing and installing is easy as the hub distributes both CAN bus and the power supply for the whole control system. This enables extra safety features to be built into the system as the hub unit is able to monitor the condition of the communication and power supply wiring, as well as the power consumption of the whole system. When the system power is distributed via the hub unit, it is able to protect more sensitive devices connected to it from e.g. overvoltage peaks.

The Hub Unit is PLCopen programmable and also has some digital inputs and outputs which can be used to connect all the surrounding devices to it.

Epec 2021 Hub Unit has two CAN bus connections spread into five connectors available to connect all common CAN devices with it. CAN connections are CANopen® compatible and user programmable, located securely in gold plated AMPSEAL connectors. The hub unit can also be used to connect e.g. SAE J1939 devices; engines, transmissions, etc. with the embedded control system. In addition to the CAN bus interface, the hub unit provides serial communication (RS485) interface for other devices.



With its versatile CAN connections, the 2021 Hub Unit withdraws the need for separate CAN gateway units in the control system, as the Hub Unit itself is able to act as a gateway between different CAN buses.

The unique design of the 2021 Hub Unit, as with other Epec control units gives them excellent endurance against impacts and mechanical wear.

PRODUCT ORDER CODE **E30B2021-10**



HUB UNIT 2021						
PROCESSOR	C167 20 MHz	APPLICATION SIZE	256 kbyte	PROGRAMMING	CODESYS 2.3	
PROTECTION CLASS	IP67	SIZE	147 X 113 X 46 mm	WEIGHT	0,7 kg	
NOMINAL OPERATING VOLTAGE	12/24 VDC	FULL OPERATING RANGE	10 ... 30 VDC			
OVERVOLTAGE PROTECTION	70 VDC	OPERATING TEMPERATURE	-40 ... +70°C			
CONNECTORS	1 X AMP23	4 X AMP8	I/O INTERFACE, CONFIGURATION EXAMPLE		6 X DI/PI	4 X PWM/DO/DI/PI 2 X AI/DI
I/O PINS TOTAL	12	COMMUNICATIONS	7 OR 8 X CAN1	1 OR 2 X CAN2	1 X RS485	