

EPIS-CU

Communication/System Unit for EPIS system

Outline

The EPIS-CU2 is the central control unit for MpicoSys EPIS- real-time low-power E-paper Passenger Information System. It is a fully embedded and reliable device, which houses the cell phone network connection (2G-4G) and the control logic for the complete individual sign. EPIS-CU can manage up to 2 E ink Display Units. Other items of the sign, like Display Unit and Solar Unit, are (plug-and-play) added by connecting plugs to the sockets on the EPIS CU.



Parameters

Parameter	Specifications	Unit
Cellphone technology	2G/4G (GPRS/LTE)	
Sim Card	Standard size	
Typical System Power consumption ¹	0.25	Watt
Input Voltage	6V ~ 17V	Volt
Dimensions	163 x 107 x 35	(mm ³)
Sim Card	Full /Standard size	
Housing	IP65	

¹ EPIS -CU with one Display Unit (EPIS-DU 133), operating at one display change per minute for daytime operation- less updates at nighttime

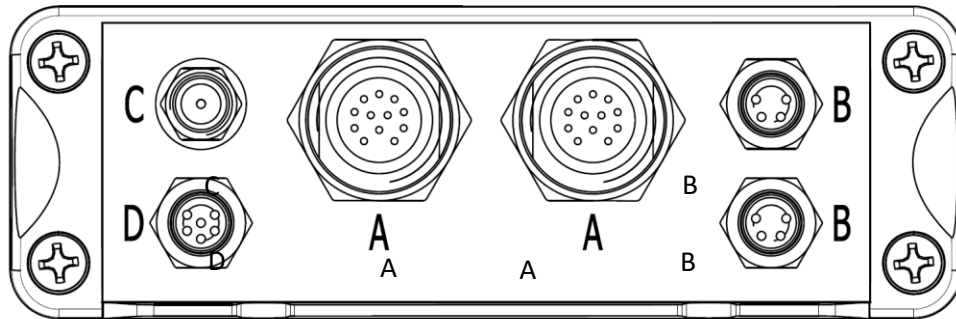
ROHS	Compliant-Pb-free	
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Supplied with EPIS CU

- 2G/4G antenna

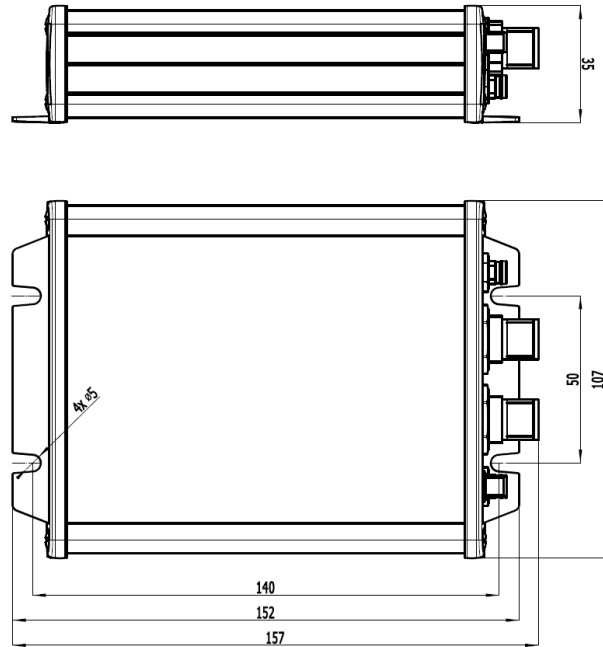
Connections

ID	Number	Connection	Connector Type
A	2	Display ²	M12 - 11 pin
B	2	Power/RS485	M8 - 4pin
C	1	Antenna	M8 - coax
D	1	Button connector	M8 - 5 pin



² For the extended EPIS-CU6 four additional Display Unit connectors will be in place on the opposite side of the EPIS-CU module

Mechanical Drawing



Mounting Footprint

4 bolts max M5 - 50x140 mm spacing

MpicoSys Epis Module family

MpicoSys offers the following modules for the EPIS System

Type Number	Description	Connects to EPIS-CU over
EPIS -CU	Communication/System Unit – up to 2 displays	
EPIS -CU6	Communication/System Unit – up to 6 displays	
EPIS-DU97	Display Module 9.7”	Display connector
EPIS-DU133	Display Module 13.3”	Display connector
EPIS-DU312	Display Module 31.2”	Display connector
EPIS-DU42	Display Module 42” (expected Q4 2021)	Display connector
EPIS-SC-SLA	Solar charger Module for SLA battery	Power-RS485
EPIS-SC-LIP	Solar charger Module for Li-Po battery	Power-RS485
EPIS-TTS	Text to Speech Module – server based	Display connector
EPIS-TTS	Text to Speech Module – Local TTS conversion	Power-RS485
EPIS-BUT	Button module with 1-4 pushbuttons	Button connector

The following power options can be provided for the real-time EPIS System

- Solar /battery operation. Solar cells and battery size will be tuned for each location
- Night time mains (Street lighting) operation. Battery will be selected at customer requirements
- Mains operation
- Solar and nighttime mains operation
- Battery Only operation – Primary, non-rechargeable battery will be selected at customer requirements