

## ELECTRICAL POWER SYSTEM (EPS)

### MAIN FEATURES

- Cold redundancy and graceful degradation
- Single point failure tolerant
- Telemetry and telecommand communication with redundant CAN bus
- Temperature ranges:
  - circuits: -40°C to 80°C qualified
  - battery: 0°C to 50°C
- Autonomous LCL protection
- Autonomous battery heater and balancing
- Two-level battery undervoltage protection
- Robust aluminium (T-7070) milling case
- Recommended for 3U/ 6U and 12U platforms



### SPECIFICATION

#### Solar Energy Harvesting

Solar Cell Type	Triple Junction Solar Cells, (~30% eff.)
Maximal Number of Solar Cells in Series	7 pcs
Number of MPPT channels	6 pcs
Maximum Input Power per Channels	12 W
Maximum incoming solar energy	50 W

#### Energy Storage

Battery Pack Configuration	2P3S
Nominal Pack Capacity (90% SOC)	5.4 Ah
Nominal Pack Stored Energy (90% SOC)	58.3 Wh
Integrated Battery Heater	YES
Balancer	YES (passive)

#### Energy Distribution

Number of LCL channels	12
Available Voltage Levels	3.3 V, 5.0 V, 9.9 V – 12.3 V (unregulated)

Continues on page 2/2



TITLE  
COMPANY  
ADDRESS  
CONTACT

C3S PLATFORM DATA SHEET  
C3S ELECTRONICS DEVELOPMENT LLC  
HU-1097 BUDAPEST, KÖNYVES KÁLMÁN KRT. 12-14.  
WWW.C3S.HU • SALES@C3S.HU • +36-21-200-5160

## Electrical Power System (EPS) / Specification

Maximum Output Current @3.3V	4 A
Maximum Output Current @5.0V	4 A
Maximum Output Current @UNREG	5 A
Maximum Peak Output Power	90 W

### Interfaces

Connector	Micro-D (MIL-DTL-83513)
Maximum Peak Output Power	90 W
Communication	Redundant CAN
Dimension	88.5 x 96 x 86 mm
Mass	~860g