



Space Grade 30% Efficiency GaAs 14466 Solar Cell Assembly

14466 E30 CIC Type A



Fully qualified **space grade** solar cell assembly

Minimum **30% efficiency** BOL on Grade A CICs, Grade B and Mechanical available

Industry standard 14466 **form factor**

Each unit **accepted** according to ECSS standards

Extensive **flight heritage** across multiple missions

General Information

Base Material	GalnP/InGaAs/Ge
Dimensions (mm)	144.75 ±0.1 × 66.65 ±0.1
Cell Area (cm ²)	77.26
Coverglass Thickness (μm)	120±20
Interconnectors	Kovar, silver coated
Bypass Protection	External Si diode

Radiation Degradation

Standard: AM0, 1sun, 1353W/m², 25°C. @fluence 1Mev [e/cm²]

Parameters	1E14	3E14	1E15
I_m/I_{m0}	0.99	0.98	0.94
V_m/V_{m0}	0.94	0.93	0.91
P_m/P_{m0}	0.93	0.91	0.855

Electrical Data

BOL Data. Standard: AM0, 1sun, 1353W/m², 25°C]

Efficiency (%)	>30
Nominal Open Circuit V_{oc} (mV)	2750
Nominal Short Circuit I_{sc} (mA)	1360
Nominal Voltage at Max.Power V_{mp} (mV)	2430
Nominal Current at Max.Power I_{mp} (mA)	1313

Checkout Verification Values

Min.average current I ($L_{avg}@V_L$ /mA)	1345
Voltage (V_L /mV)	2300