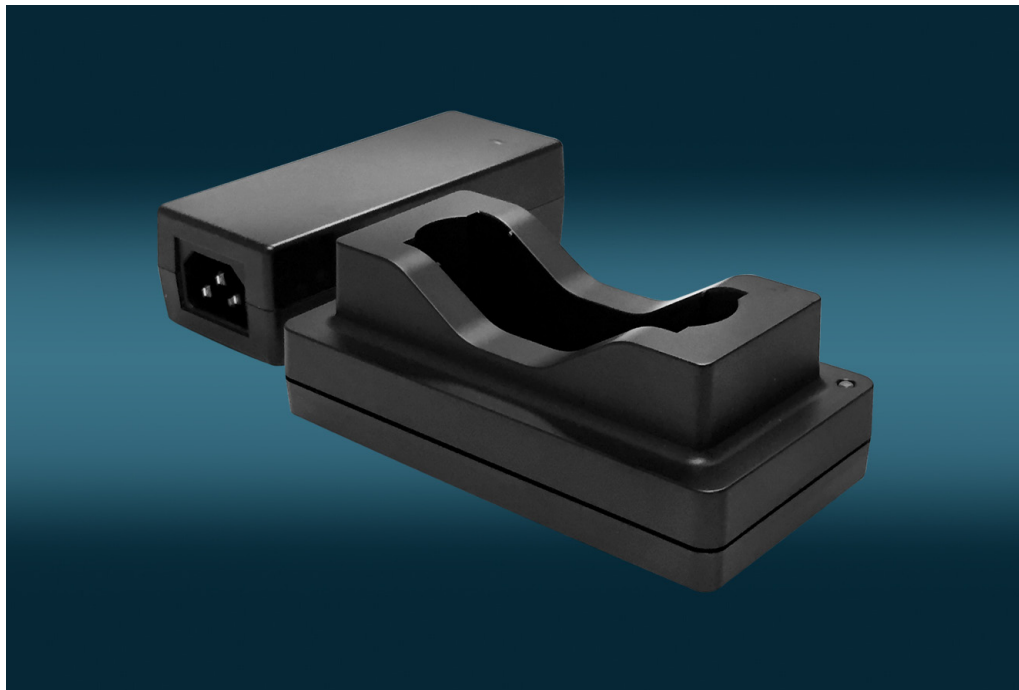


# SMBUS Universal Mini Battery Charger D90515

55 Watt SMBUS Desktop Universal Battery Charger for Smart Batteries



### Features:

- Single bay fast charger
- For use with standard, smaller form factor battery packs
- Optimized charging process for D92040, D92057, D92040-2, D92054 dedicated Cell-Con batteries: longer cycle life / faster charging
- Simple operation – Plug and Play
- Automatic recognition and calibration of smart battery learned capacity
- External power supply for worldwide use
- Country specific AC input cables available

### Applications:

Standard charging station for mobile devices used in medical, industrial, and consumer markets



Input	
Voltage range	24VDC
Power	55W
Current	2300mA nominal

Output	
Voltage range	0 - 17.4VDC
Current range	0 - 4.8A
Voltage tolerance*	+/- 1% maximum
Current tolerance*	+/- 10% max. @1A, +/- 3% max.@4A
Protection	Short circuit Over temperature shutdown Input / output over current

General	
Efficiency**	~95% at 100% load
MTBF	> 20000h at 25°C and full load per MIL-HDBK 217F
Indicator	Multi-color LED (green, red, orange)
Battery types	Standard battery form factors D92040, D92057, D92040-2, D92054
Green procurement	RoHS2002/95/EC WEEE 2002/96/EC, Chinese RoHS

Environmental	
Cooling	Convection cooled
Temperature	Operating: 0°C to 40°C Non-operating -10°C to 70°C
Pressure & Altitude	Operating: 1060hPa to 795hPa -382m to 2000m Non-operating: 1060hPa to 572hPa -382m to 4570m
Humidity	5% to 95% r.H., non-condensing

Charger Mechanical Details	
Dimensions (LxWxH)	120 x 64 x 43mm
Weight	110g (excluding power supply)

Notes: \*Total regulation tolerance includes initial set accuracy, line and load regulation  
 \*\*Power losses of input and output cables are not considered here.



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LED Indications	
One time Red/Orange/Green	Self test: Charger is ready for use.
Red/Green blinking	Battery recognition and initialization.
Orange blinking	The battery is currently being calibrated.
Orange light	The inserted battery is of the correct type and is currently being charged.
Green light	The battery is charged and can be removed for use.
Red blinking	The battery is too hot or too cold to be charged without damage. If the battery is too cold it will be charged as soon as it has warmed up sufficiently. If the battery is too hot it should be removed to cool down.
Red light	The battery is damaged or it is a conventional battery which cannot be recharged.

Safety & EMC	In combination with specified external AC/DC power supply	
Regulatory approvals	Europe	CE
Electromagnetic Emissions	Europe USA	EN55011, EN55022, level B FCC15 class B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity EFT / Burst Surge Conducted Immunity Magnetic Fields Voltage dips, short instrumentations & voltage variations Immunity characteristics	EN/IEC61000-4-2 EN/IEC61000-4-3 EN/IEC61000-4-4 EN/IEC61000-4-5 EN/IEC61000-4-6 EN/IEC61000-4-8 EN/IEC61000-4-11  EN55024

### Specification external AC / DC power supply

Input	
Voltage range	100-240 VAC
Current	1.5A maximum
Stand by power	No load < 0.5W @ 230 VAC

Output	
Voltage range	24VDC
Power	65W maximum
Current range	2.7A
Protection	Over voltage, Short circuit

General	
Efficiency	CEC Level V
Line regulation	+/- 1%
Ripple & Noise	240mV (p-p)

Power Supply Mechanical Details	
Standard output connector	DC barrel jack
Housing dimensions (LxWxH)	114 x 47 x 33mm
Input weight	225g

Environmental	
Temperature	Operating: 0°C to 40°C Non-operating -10°C to 70°C

Safety & EMC Approvals			
Region	Approvals	Region	Approvals
USA / Canada	cULus	Europe	CE
International	CB	Australia	RCM
Russia (Customs Union)	EAC	Korea	KC
China	CCC	Japan	PSE

