Intelligent Battery Charging Programmer

SBP-001

User's Manual



GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

TPTC004 IEC62368-1

Features

- For MEAN WELL's intelligent battery chargers, Charging curve programmable suitable for models:
  ENC-120/240/360
  NPB-450/750/1200/1700
  DRS-240/480
  HEP-1000,HEP-2300-55
  RPB/RCB-1600
  DBU/DBR-3200
- Simple connection and configuration
- No need of battery or AC power
- LED status indicator
- Communication cables of SBP#1,SBP#2,SBP#3,SBP#4 included (USB cable Type A - Mini USB is not included)

Description

SBP-001 is a programmer, particularly for MEAN WELL's various programmable battery charger models to program the parameters of charging curves, such as constant current (CC), constant voltage (CV), float voltage (FV) and tapper current (TC), tapper current(TC) and so on, to accommodate the diversified battfor simplicity and convenience, users can easily configure MEAN WELL's intelligent battery chargersery specification in industry. With the design accounting with SBP-001 programmer and the computer; all of the setups are able to be finished easily by the means of the specific software.

Model Encoding

SBP - 001

- 001 — First generation (Smart Battery programmer)
- SBP — Series name

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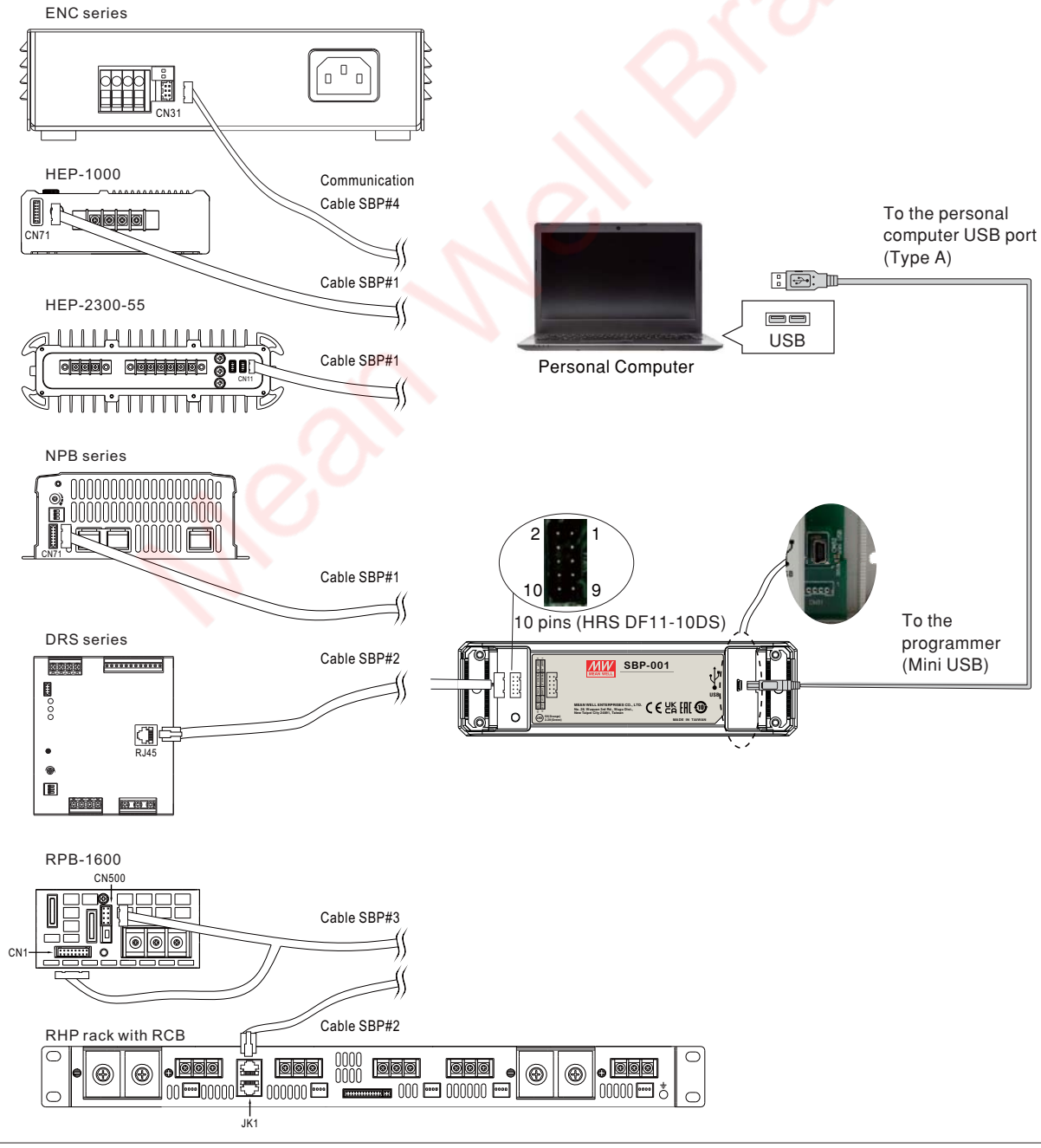
SPECIFICATION

MODEL		SBP-001
FUNCTION	COMM. PC INTERFACE	Mini USB
	COMM. PROGRAMMING INTERFACE	PMBus, CANBus, UART
	LED INDICATOR	Green: 3.3V interface Orange: 5V interface
	PROGRAMMING VOLT.	5V and 3.3V, for programming purpose only. Total 0.5W(max.)
ENVIRONMENT	WORKING TEMP.	0~ +40℃
	WORKING HUMIDITY	20 ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-10 ~ +50℃, 10 ~ 95% RH non-condensing
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
SAFETY & EMC	SAFETY STANDARDS	IEC62368-1 CB, EAC TP TC 004 approved
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Conduction Class B, Radiation Class A ; BS EN/EN61000-3-2,-3, EAC TP TC 020
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61000-6-1(BS EN/EN50082-2), light industry level, criteria A, EAC TP TC 020
OTHERS	MTBF	3103.9K hrs min. Telcordia SR-332 (Bellcore) ; 312.9K hrs min. MIL-HDBK-217F (25℃)
	DIMENSION	165*46*23mm (L*W*H)
	PACKING	0.12Kg; 84pcs/11Kgs/1.81CUFT

■ Smart Programmer Connection



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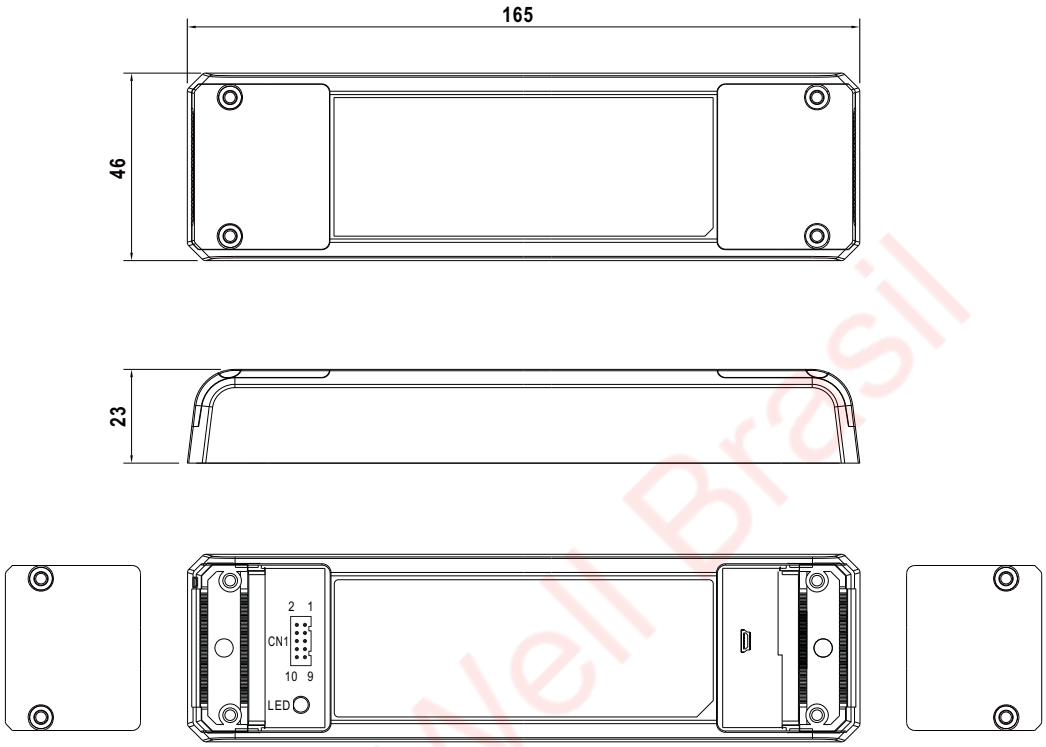
■ Mechanical Specification

Case No.DAP-04 Unit:mm



Control Pin No. Assignment (CN1) : HRS DF11-10DP-2DSA or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	UART_RX	6	CANL	HRS DF11-10DS or equivalent	HRS DF11-**SC or equivalent
2	UART_TX	7	5V		
3	PMBUS_D	8,10	GND		
4	PMBUS_C	9	3.3V		
5	CANH				

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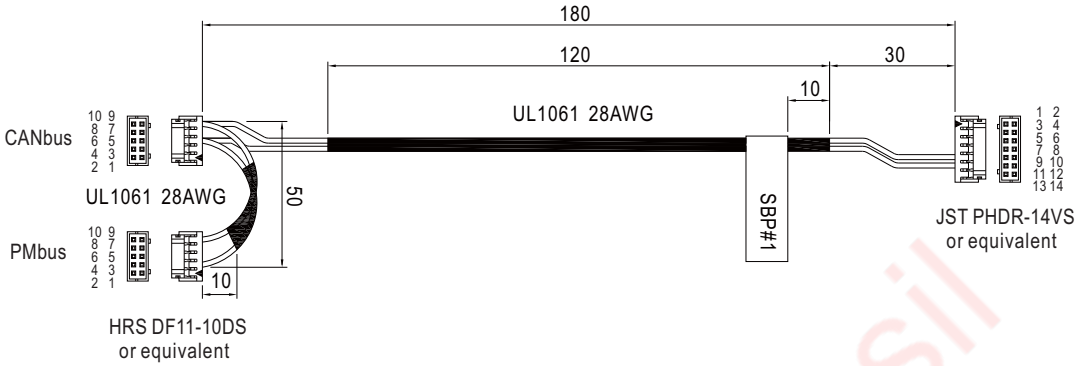
※ SBP#1 communication cable





Connector	Pin Assigment									
HRS DF11-10DS PIN NO.(**CANbus**) 10 9 2 1	1	2	3	4	5 (CANH)	6 (CANL)	7	8	9	10 (GND)
HRS DF11-10DS PIN NO.(**PMbus**) 10 9 2 1	-----	-----	-----	-----	3 (SDL)	4 (SCL)	-----	-----	-----	10 (GND)
Wire color	-----	-----	-----	-----	White	Orange	-----	-----	-----	Black
JST PHDR-14VS PIN NO. 1 2 13 14	-----	-----	-----	-----	11	12	-----	-----	-----	9 (GND)
Wire color	-----	-----	-----	-----	Blue	Yellow	-----	-----	-----	Black

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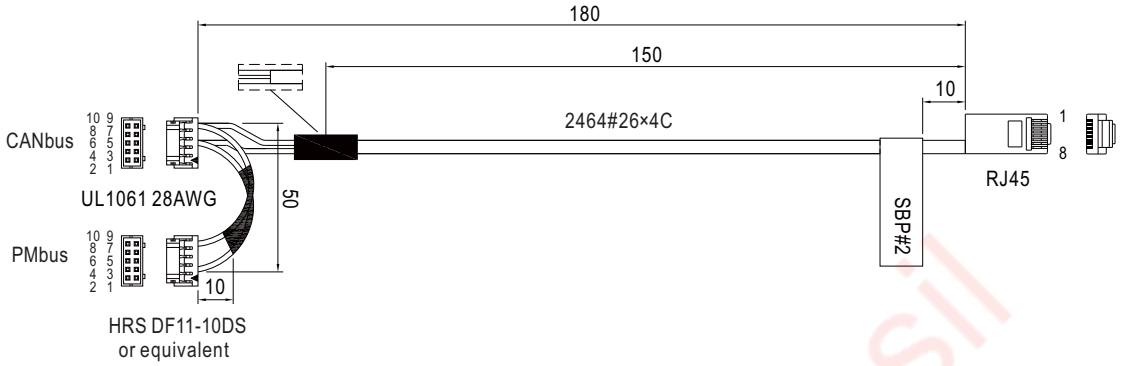
※ SBP#2 communication cable





Connector	Pin Assigment									
HRS DF11-10DS PIN NO.(**CANbus**) 10 9 2 1 	1	2	3	4	5 (CANH)	6 (CANL)	7	8	9	10 (GND)
HRS DF11-10DS PIN NO.(**PMbus**) 10 9 2 1 	-----	-----	-----	-----	3 (SDL)	4 (SCL)	-----	-----	-----	10 (GND)
Wire color	-----	-----	-----	-----	White	Orange	-----	-----	-----	Black
RJ-45  1 8	-----	-----	-----	-----	6	7	-----	-----	-----	8
Wire color	-----	-----	-----	-----	Green	White/Brown	-----	-----	-----	Brown

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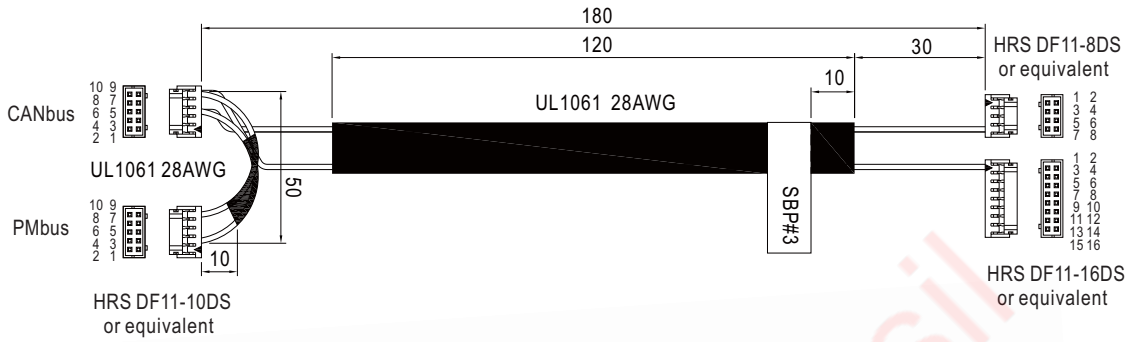
※ SBP#3 communication cable





Connector	Pin Assigment									
HRS DF11-10DS PIN NO.**(CANbus)**	1	2	3	4	5 (CANH)	6 (CANL)	7	8	9	10 (GND)
HRS DF11-10DS PIN NO.**(PMbus)**	-----	-----	-----	-----	3 (SDL)	4 (SCL)	-----	-----	-----	10 (GND)
Wire color	-----	-----	-----	-----	White	Orange	-----	-----	-----	Black
HRS DF11-16DS PIN NO.**(CANbus)**	-----	-----	-----	-----	-----	-----	-----	-----	-----	2
HRS DF11-8DS PIN NO.**(CANbus)**	-----	-----	-----	-----	7	8	-----	-----	-----	-----
Wire color	-----	-----	-----	-----	Blue	Yellow	-----	-----	-----	Black

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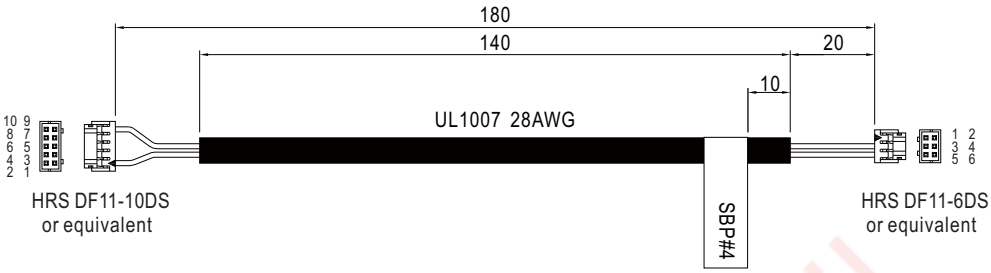
※ SBP#4 communication cable





Connector	Pin Assigment									
HRS DF11-10DS PIN NO. 	1	2	3	4	5	6	7	8	9	10
HRS DF11-6DS PIN NO. 	4	3	-----	-----	-----	-----	-----	-----	1	2
Wire color	Blue	Yellow	-----	-----	-----	-----	-----	-----	Red	Black

■ Charger VS Communication Cable

MW's charger		Communication Cable
Series name	Connector	
ENC-120/180/240/360	CN31	SBP#4
RCB-1600	JK1	SBP#2
RPB-1600	CN1, CN500	SBP#3
DBR-3200	JK1	SBP#2
DBU-3200	CN1, CN500	SBP#3
HEP-1000	CN71	SBP#1
HEP-2300-55	CN11	SBP#1
NPB-450/750/1200/1700	CN71	SBP#1
DRS-240/480	RJ45	SBP#2
NCP-3200	JK1	SBP#2

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