



## BMCS Install and Commissioning Checklist

<b>Customer</b>		<b>Result</b>
<b>Site Address:</b>		Pass/Fail
<b>Project:</b>		
<b>Engineer:</b>		
<b>Company</b>		
<b>BMCS Webmanager Serial Number:</b>		
<b>Module Type:</b>		

Checklist No.	Task	Acceptable Result	Notes	Verification Pass (P)/Fail (F)	
				Installer	Customer
1	Clean battery surfaces in accordance with battery manufacturers documentation.	Battery surface free of dust and oil for adhesives			
2	BMCS Measurement Cables installed in accordance with quick start guide.	Measurement Cables should be installed with the correct polarity and connection to battery post as directed by quick start guide			
3	Install BMCS CXX modules in accordance with the quick start guide. Connect measuring cable to the CXX module.	Adhesive material has to be separated from the module and proper pressure applied for secure connection to the battery			
4	Install BMCS Bus Cables in accordance with quick start guide.	Keep bus cable neat and uniform throughout the system. Observe distance limitations of total bus cable length. If the systems has more that 40 modules use a BMCS splitting box.			
5	Install BMCS Webmanager in accordance with quick start guide.	Securely mount the BMCS Webmanager and observe distance limitations.			
6	Address programing of BMCS modules using the BMCS programming tool.	Modules will have a unique address id and once programmed all modules should be flashing green			
7	Using the BMCS Reader tool verify Module voltage, temperature and resistance. Use the logging option to save the data to csv and attach to commissioning report.	Specification on values: Voltage - 0.5%, Temperature 15%, and Resistance C40 10% all other modules 5%. Values can be verified with handheld test equipment			
8	Check/Update Firmware Version on Webmanager	Firmware should be updated to the latest version on Generex Website. Record firmware version in notes field.			
9	Configure BMCS Webmanager according to the "Quick start instructions CS121" and the "Quick start instructions BMCS C20-C40". After successfully setting up your BMCS and BMCS Webmanager using the Quick start Guide.	All C modules should show green LEDs and BMCS Status page should show no warnings and no alarms.			
10	Enter "BMCS Configuration" page: Check Voltages, temperature of all modules on BMCS Screen if reasonable values and if all modules are showing a green static led.	All C modules should show green LEDs and BMCS Status page should show now warnings and no alarms.			
11	Enter "Timeserver Configuration" Set the IP address for network time protocol. Set the proper timezone.	BMCS Webmanager will have the proper time set for logging data and discharges.			
12	Set Thresholds for Alarm and Warning for RI and Temperatures. See user manual BMCS, Chapter 4 "4.3 BMCS Module & Alarm Threshold Settings" for correct settings.	All C modules should show green LEDs and BMCS Status page should show now warnings and no alarms.			
13	Choose discharge detection source - Press APPLY before leaving the page "BMCS Configuration"	At a discharge the BMCS system should read the status either from UPS or BMCS Current Sensor. If none of theses devices are connected the discharge detection will use the battery voltage as default.			
14	Enter "Email Configuration" page: Enter the appropriate email information so the BMCS Webmanager can send out emails on events.	BMCS Webmanager will be able to email events. Once configured and saved a test email can be sent.			
15	Save Exit and Reboot	All changes will be saved and applied to the BMCS Webmanager on reboot.			
16	Record BMCS Battery Thresholds	BMCS thresholds set for proper values in relation to battery model	Record thresholds settings Voltage Warning Temperature Warning Resistance Warning Voltage Alarm Temperature Alarm Resistance Alarm	Low	High
17	Optional if not used by end user: Verify Modbus and SNMP Servers are operational	BMCS Webmanager by default has SNMP and Modbus TCP enabled. Test with 3rd party programs to WM			
18	Enter "Save Configuration" Menu and save BMCS.ini and upsman.cfg to local machine	Offsite backup of the BMCS Webmanager configuration for quick recovery.			

\_\_\_\_\_  
Commissioning Technician

\_\_\_\_\_  
Date



VOLTAGE

Module #	Meter	BACS	Module #	Meter	BACS
163			217		
164			218		
165			219		
166			220		
167			221		
168			222		
169			223		
170			224		
171			225		
172			226		
173			227		
174			228		
175			229		
176			230		
177			231		
178			232		
179			233		
180			234		
181			235		
182			236		
183			237		
184			238		
185			239		
186			240		
187					
188					
189					
190					
191					
192					
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					
203					
204					
205					
206					
207					
208					
209					
210					
211					
212					
213					
214					
215					
216					



IMPC

Module #	Meter	BACS	Module #	Meter	BACS
163			217		
164			218		
165			219		
166			220		
167			221		
168			222		
169			223		
170			224		
171			225		
172			226		
173			227		
174			228		
175			229		
176			230		
177			231		
178			232		
179			233		
180			234		
181			235		
182			236		
183			237		
184			238		
185			239		
186			240		
187					
188					
189					
190					
191					
192					
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					
203					
204					
205					
206					
207					
208					
209					
210					
211					
212					
213					
214					
215					
216					



TEMP

Module #	Meter	BACS	Module #	Meter	BACS
163			217		
164			218		
165			219		
166			220		
167			221		
168			222		
169			223		
170			224		
171			225		
172			226		
173			227		
174			228		
175			229		
176			230		
177			231		
178			232		
179			233		
180			234		
181			235		
182			236		
183			237		
184			238		
185			239		
186			240		
187					
188					
189					
190					
191					
192					
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					
203					
204					
205					
206					
207					
208					
209					
210					
211					
212					
213					
214					
215					
216					