DIRECTOR SOLDIER SYSTEMS PROGRAM MANAGEMENT (DSSPM)

REQUEST FOR INFORMATION
CORAL C CR TYPE BATTERIES

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Background and Purpose of this Request for Information (RFI)

The Department of National Defence (DND), Director Soldier Systems Program Management (DSSPM) is launching a Request for Information (RFI) in order to seek information and feedback from suppliers and Industry with regards to their capability in providing the various type batteries as identified in the attached Annexes.

Nature of Request for Information

This RFI is neither a call for tenders nor a Request for Proposal (RFP) and no agreement or contract will be entered into with any contract or based on responses to this RFI. The issuance of this RFI is not to be considered in any way as a commitment by the Government of Canada or as authority for any companies to undertake any work which could potentially be chargeable to Canada, nor is this RFI to be considered a commitment to issue eventual RFP's or award eventual contracts.

Canada shall not be bound by anything stated in this RFI. Canada reserves the right to change at any time any or parts of this RFI as deemed necessary. Should there be any changes to this RFI, those companies that have expressed interest in responding to this RFI will be advised.

This RFI is simply intended to solicit feedback from Industry. Whether a potential supplier responds to this RFI or does not preclude that a supplier from participating in any potential future procurement.

Nature and Format of Responses Requested

Respondents are invited to provide as much information as possible in response to this RFI and are requested to provide their comments and concerns and, where applicable, alternative recommendations regarding how the requirements or objectives described in this RFI could potentially be satisfied. Respondents are also invited to provide comments regarding the content, format and/or organization of any draft documents included in this RFI. Respondents should explain any assumptions they make in their responses.

Response Costs

Canada will not reimburse any respondent for expenses incurred in responding to this RFI.

Treatment of Responses

Use of Responses: The responses received may be used by Canada to develop or modify procurement strategies or documents. Canada commits to review all RFI responses received

Review Team: A review team composed of representatives of the client (where applicable) and Public Services and Procurement Canada (PSPC) will review the responses. Canada reserves the right to hire any independent consultant, or use any Government resources that it considers necessary in order to review any response.

Confidentiality: Respondents should clearly indicate any portions of their response that they consider proprietary or confidential. Canada will treat the responses in accordance with the Access to Information Act.

Follow-up Activity: Canada may, at its discretion, contact any respondents to follow up with additional questions or for clarification of any aspect of a response.

Contents of this RFI

This RFI contains Annexes detailing the technical specifications of the various batteries required by DND and a proposed schedule. This RFI also contains specific questions addressed to Industry.

Objectives of the RFI

In order to meet both training and operational requirements to support the Coral C and Coral CR fleet, DND is looking to establish a Standing Offer (SO) to meet current and future requirements. The results of this RFI will form the requirements to establish the standing offer which is expected in 2022.

The objectives of this RFI are:

a. To invite vendors to identify the types of batteries they provide and cost in comparison to the Technical Specification Annexes;

b. To invite vendors to ask questions regarding the attached Technical Specifications.

General requirements

The Canadian Armed Forces (CAF) utilizes the Coral C and the Coral CR imagers during operations. They are used for low to zero visibility situations due to low light, weather, and / or battlefield conditions.
The imagers accept a non-rechargeable or a rechargeable battery to power its operation. Interested Suppliers/Companies must have batteries that meet the specifications set-out in this RFI.

Question to Industry

Please answer the questions as per relevance to each type of battery.

Q1) Based on the Technical Specification outlined in the attached annexes, Is your company capable of providing all the batteries listed?

Q2) Otherwise, what types of batteries can you offer??

Q3) What is the hazardous materials information for each type of battery?

Q4) What are the relevant industry standards that apply to each type of battery?

Q5) What are the dark or matte colors offered for each type of battery??

Q6) What is the chemical composition of each type of battery?

Q7) Do your batteries have over-voltage protection?

Q8) Do your batteries include protection against voltage drops?

Q9) Do your batteries include short circuit protection?

Q10) Do your batteries include reverse polarity protection?

Q11) Do your batteries include overheat protection?

Q12) Do your batteries include a charge indicator?

Q13) Which chargers are compatible with your batteries?

Q14) What is the maximum charging current of your batteries?

Q15) Do your rechargeable batteries have a State of Charge Indicator?

Q16) Having reviewed the technical specifications set out in the attached annexes, are there any specific issues you would like to raise?

Q17) How long does it take to receive a batch of batteries (from order to delivery)?

Q18) What would be the estimated costs for each battery type based on the table below?

Description as per Annex indicated	Unit of Issue	Unit Price	Quantity	Extended Price
Annex A BATTERY, NON -RECHARGEABLE Coral CR-C	EA		600	
Annex B BATTERY, RECHARGEABLE, Coral CR-C	EA		500	
Annex C BATTERY, NON-RECHARGEABLE Coral C	EA		300	
Annex D RECHARGEABLE, BATTERY, Coral C	EA		250	
Annex E Single-use battery for flashlights	EA		5000	

If responding to this RFI, please provide the following information:

i) Contact's Name. mailing address and phone numbers

ii) Point of contact

iii) Position title of point of contact

iv) Email address and phone number

RFI Authority

The Department of National Defense is responsible for the management of the RFI Process. The DND contact and RFI authority for this RFI is:

RFI Authority: Derrick Morrow
E-mail Address: derrick.morrow@forces.gc.ca
Telephone: (613) 203-2105

Format of Responses

Response to this RFI requires only an email (with attachments as deemed applicable) response to the RFI Authority. The email response should contain:

i. this RFI number in email subject line;
ii. the name, email address and telephone number of the respondent; and
iii. the answers to the questions in Questions to Industry Section of this RFI;

Inquiries

Inquiries regarding this RFI shall be directed to the RFI Authority. Because this is not a bid solicitation, the Government of Canada will not necessarily respond to all inquiries in writing, nor circulate all answers to Industry. However, in the event that answers are circulated, Inquirers should clearly identify portions of their questions that are proprietary in nature. Canada may edit the questions or request that the Inquirer do so, so that the proprietary nature of the question is eliminated, and the inquiry can be circulated to Industry.

Submission of Responses

Time and Place for Submission of Responses: Industry members interested in providing a response should submit their responses by email to the RFI Authority by 2022-07-20.

Responsibility for Timely Delivery: Each respondent is solely responsible for ensuring its response is delivered to the correct email address as indicated above.

Identification of Response: Each respondent should ensure that its name and email address, the solicitation number and the closing date appear in the response.

ANNEX A

Technical Specification – Battery, Non-Rechargeable, Cylinder design

BATTERY NON-RECHARGEABLE used in Coral CR-C HHTI, 5855-20-004-6740

TECHNICAL SPECIFICATIONS

Li-SO2 Battery System

Features Required

• Internally Fused

• Normally closed thermal fuse

• Total Discharge circuit

• Diode Protection to prevent charging

Application

• AN/PAS-503 Coral CR-C HHTI
• MDVR-3000

Electrical Characteristic

• Typical OCV (V) 6.0

• Nominal voltage (at 500mA) (V) 5.3

• Cut-off (V) 4.0V

• Capacity (Ah) 7.5Ah at 250mA discharge

• Operating temperature -20° C to +55° C

• Storage Temperature max -40°C/ +55°C

Physical Characteristics

• Typical Weight (g/oz) 220 / 7.76

• Weight of Li metal content (g/oz) 4.8 / 0.17

• Max. OD (mm/ in) 35.51/ 1.398

• Max. Height (mm/ in) 128.5 / 5.059

• Color NATO Green, dark matte

- Outline Disposal Procedures

References

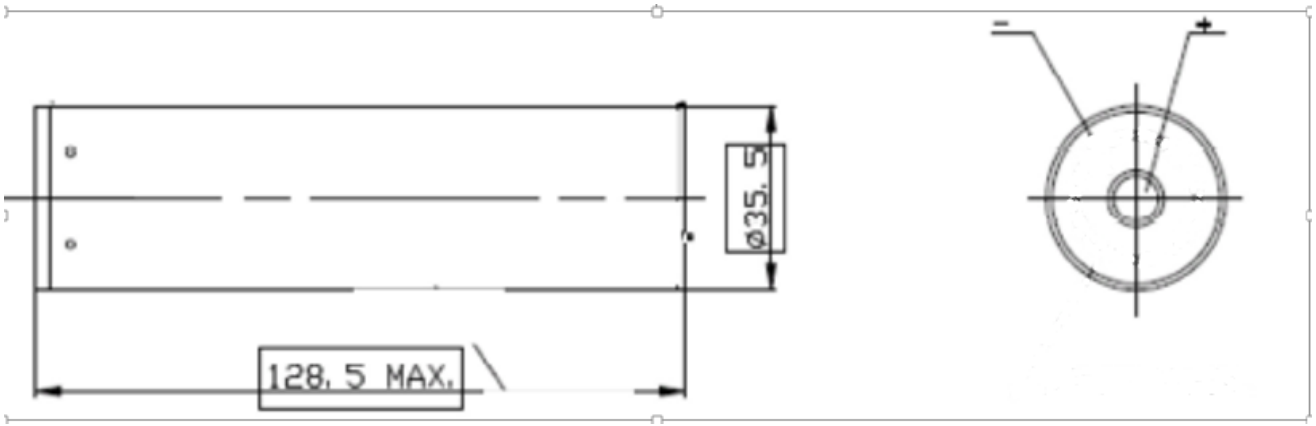
- Reference specifications MIL PRF 49471B (CR) or Saft Standard Specifications
- NSN Reference 6135-01-440-7774

Applicable Standards

- MIL-STD-810E
- MIL-STD-461C
- UN-38.3 certification
- UL approved cells

Quality System

- ISO-9001:2008; AS-9100



ANNEX B

Technical Specification - Battery, Rechargeable, Cylinder design

BATTERY RECHARGEABLE used in Coral CR-C HHTI, 5855-20-004-6740

TECHNICAL SPECIFICATIONS

- Li-Ion Type Battery
- Cylindrical rugged tough case construction

Features Required

- High energy density
- One wire battery communication technology
- Smart Charger technology
- State Of Charge Indicator (SOCI)
- Charge Method (CCCV)

Safety

- - Cell charge over voltage protection_
- - Cell discharge under Voltage protection
- - Over current and short circuit protection
- - Over temperature protection
- - Reverse Polarity

Application

- AN/PAS-503 Coral CR-C HHTI
- MDVR-3000

Electrical Characteristic

- Charging Voltage: 8.4 VDC Max.
- Charging Current 2.5A Max
- Nominal Voltage 7.2 VDC
- Min Voltage 5.2 VDC
- Typical Capacity 5Ah @ 1A

- Energy 37 Wh
- Max Continuous Discharge Current 4A
- Charge 0°C to 45°C
- Discharge -32°C to 60°C
- Storage -40°C to 71°C
- Humidity 0 to 90%

Physical Characteristics

Dimensions (Max.) (L,D): 128.5 mm; 35.5 mm

Weight 295 grams

Energy Density (Weight/Volume) 122 Wh/kg / 283 Wh/L

Color NATO Green or Dark Matte

Compatible Charger ESC-2800D

References

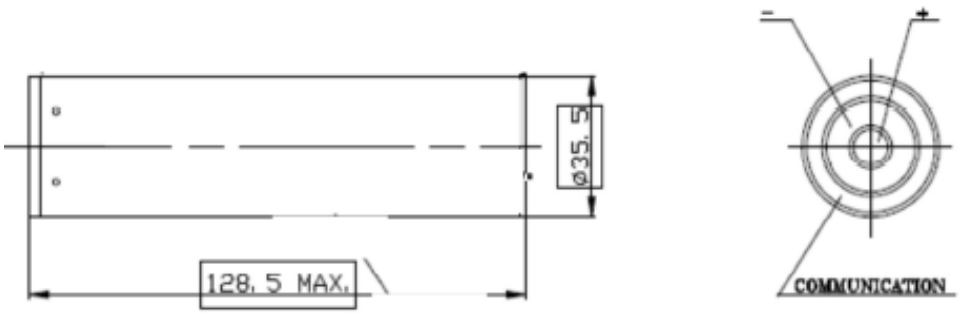
- NSN 6140-15-180-5984
- ELI-2800E

Applicable Standards

- MIL-STD-810E
- MIL-STD-461C
- UN-38.3 certification
- UL approved cells

Quality System

- ISO-9001:2008; AS-9100
- Does it incorporate SMBus v1.1 and SBData v1.1
- Does it comply with UN/DOT 38.3



ANNEX C

Technical Specification - Battery Non-Rechargeable, Cuboid design

BATTERY NON-RECHARGEABLE used in Coral C HHTI, 5855-20-003-3770

TECHNICAL SPECIFICATIONS

- Chemistry#: Li/MnO2 or LiSO2
- Cuboid tough rugged case construction

Features Required

- Connector 2 Hole Socket and Flat Contacts
- Internally Fused
- Normally closed thermal fuse
- Total Discharge circuit
- Diode Protection to prevent charging

Application

HHTI (AN/PAS-22A)

Electrical Characteristics

- Voltage 6.0 VDC
- Maximum Voltage 6.6 VDC
- Capacity 10 Ah
- Discharge 2A max continuous

- Pulse Discharge 3A max
- Storage Temperature -40°C to +40°C (-40°F to +104°F)
- Operating Temperature -20°C to +55°C (-4°F to +131°F)

Physical Characteristics

- Length 2.55 +/- 0.031 in (64.77 +/- 0.79 mm)
- Width 1.50 +/- 0.031 in (38.10 +/- 0.79 mm)
- Height 3.75 +/- 0.031 in (95.25 +/- 0.79 mm)
- Weight 0.86 lb (0.39 kg)
- Connector One two hole (TYPE IV) female socket and three Nickel plated steel flat contacts per MIL-B-18E

References

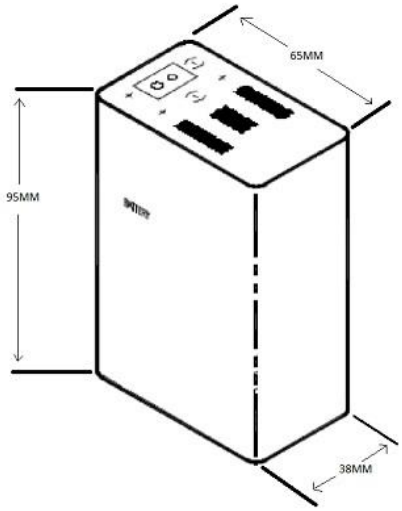
- NSN 6135-01-455-7946
- BA-5347/U

Applicable Standards

- MIL-STD-810E
- MIL-STD-461C
- UN-38.3 certification
- UL approved cells

Quality System

- ISO-9001:2008; AS-9100
- Does it incorporate SMBus v1.1 and SBData v1.1?
- Does it comply with UN/DOT 38.3?



ANNEX D

Technical Specification - Battery Rechargeable, Cuboid design

BATTERY RECHARGEABLE used in Coral C HHTI, 5855-20-003-3770

TECHNICAL SPECIFICATIONS

- Chemistry#: Li-ion
- Cuboid tough rugged case construction

Features Required

- SMBus
- State of Charge Indicator
- Connector 2 Hole Socket and Flat Contacts

State Safety Features

What safety features do your batteries incorporate?

Application

HHTI (AN/PAS-22A)

Electrical Characteristics

Size / Weight

- Voltage 7.2 VDC
- Maximum Voltage 8.4 VDC

- Capacity 9.3 Ah
- Storage Temperature -40°C to +40°C (-40°F to +104°F)
- Operating Temperature -20°C to +60°C (-4°F to +140°F)

Physical Characteristics

- Length 2.55 +/- 0.031 in (64.77 +/- 0.79 mm)
- Width 1.50 +/- 0.031 in (38.10 +/- 0.79 mm)
- Height 3.75 +/- 0.031 in (95.25 +/- 0.79 mm)
- Weight 0.84 lb (0.38 kg)

Reference

Military#: BB-2847A/U

NSN: 6140-01-493-8092 (BT-70747BK)

Does it incorporate SMBus v1.1 and SBData v1.1

Does it comply with UN/DOT 38.3

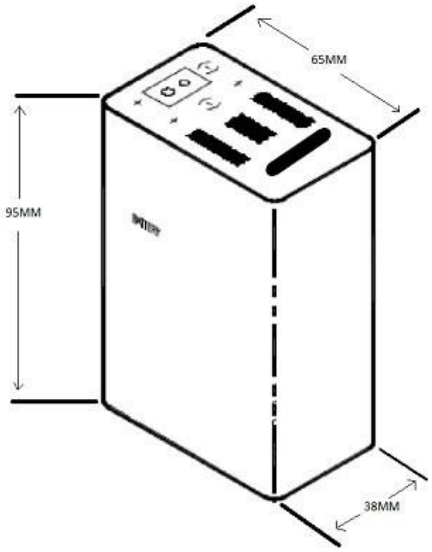
Must be compatible with BTC-70541-1 / BTC-70747 Battery Chargers

Applicable Standards

- MIL-STD-810E
- MIL-STD-461C
- UN-38.3 certification
- UL approved cells

Quality System

- ISO-9001:2008; AS-9100
- Does it incorporate SMBus v1.1 and SBData v1.1?
- Does it comply with UN/DOT 38.3?



ANNEX E

Technical Specification - CR-123

Cell Type CR123A Specifications

Nominal Capacity*1 – [1400mAh];
Nominal Voltage – [3V];
Standard Discharge Current – [10mA];
Max. Discharge Current – [Continuous*2 _ 1500mA],
[Pulse*3 _ 3500mA];
Temperature Range – [-40°C ~60°C];
Weight – [17g];
Dimensions – [D 17.0mm], [H 34.5mm], [d 6.3mm];

*1 Nominal capacity is determined to an end voltage of 2.0V when the battery is allowed to discharge at a standard current level at 23°C.

*2 Current value is determined to be the level at which 50% of the nominal capacity is obtained with an end voltage of 2.0V at 23°C.

*3 Current value for obtaining 1.0V cell voltage when pulse is applied for 15seconds at 50% discharge depth at 23°C.

DIMENSIONS