



TECHNOLOGY MANAGEMENT

TRACK TECHNOLOGY MANAGEMENT

SPECIFICATION

DATA ACQUISITION ACCESSORIES

Specification no.: **RMT/IP/2021/005**

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Date: 15 September 2021

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1 SCOPE

1.1. Document Overview

This document contains a specification for accessories and consumables for data acquisition system and mobile testing units. The accessories will be used to house and protect the data acquisition equipment together with the mobile testing units.

The tender shall include the supply and commission of the accessories.

1.2. Version

This document supersedes all previous versions of the specification.

1.3. Identification

The list of accessories and consumables are as follows:

- a) Cover Plates
- b) Plastic/PVC Housing for Equipment, Accessories and Consumables
- c) Aluminium Panel Kit - Housing for Equipment, Accessories and Consumables
- d) Jerry Cans

2 COMPLIANCE

- A. The equipment, accessories offered must comply with the specification.
- B. The supplier must indicate paragraph by paragraph with reference to the paragraph numbers herein, either that equipment/accessories/ consumables offered complies in every aspect of the specification or, if not, precisely how it differs from the specification.
- C. The supplier may propose different equipment/accessories/consumables of similar parameters or perform the same function. The proposed equipment shall be better than the one specified on the specification.
- D. A broad statement that the equipment is in accordance with the specification is not adequate. The statement shall be supported by the full evidence.
- E. A price breakdown of all equipment, accessories and consumable with reference to table 1 shall be provide.

3 REQUIREMENTS

3.1 List and Quantities

A. Table 1 below present the list and quantity of the accessories and consumable required

#	Equipment/Accessory/ Consumable	Quantity
A.	Cover Plates	16
B.	Plastic/PVC Housing for Equipment, Accessories and Consumables	2
C.	Aluminium Panel Kit - Housing for Equipment, Accessories and Consumables	2
D.	Jerry Cans	4

3.2 Accessories Requirements

The supplier may propose different kind accessories performing the same function.

3.2.1 Cover Plates

The housing cover plates shall meet the following minimum requirements:

- a) Shall cover the 48, 57 and 60 kg/m side rail profile.
- b) Shall not protrude the rail height of 100mm from the bottom of the rail foot to the top.
- c) Shall fit between sleeper spacing of 550 to 700mm.
- d) Shall protect sensors against vandalism and theft.
- e) Shall fit the sensor cables
- f) Shall be stainless steel/hot dip galvanised and or hard plastic.
- g) Shall fit on either side of the rail (field/gauge side)
- h) Shall fasten using screws together with nylon nuts.
- i) Shall fasten underneath the rail.
- j) The supplier can propose the best suitable and appropriate design.

3.2.2 Plastic/PVC Housing for Equipment, Accessories and Consumables

The housing for equipment, accessories and consumables shall meet the following minimum requirements:

- i. The size shall be $\pm 650 \times 400 \times 350$ (L x W x H)

- ii. Shall house the data acquisition equipment, accessories and consumables
- iii. Shall have automatic pressure equalization valve - balances interior pressure, keeps water out.
- iv. Shall have Comfortable rubber over-moulded handle.
- v. Easy open double throw latches.
- vi. Stainless steel hardware and padlock protectors.
- vii. Shall be portable.
- viii. Shall have wheels.
- ix. Shall have spring loaded handles.
- x. Shall be water tight.
- xi. Shall be dust proof.
- xii. Shall be crush proof.

3.2.3 Aluminium Panel Kit - Housing for Equipment, Accessories and Consumables

The housing for equipment, accessories and consumables shall meet the following minimum requirements:

- a) The size shall be $\pm 650 \times 400 \times 350$ (L x W x H)
- b) Shall house the data acquisition equipment, accessories and consumables
- c) Shall have automatic pressure equalization valve - balances interior pressure, keeps water out.
- d) Shall enable ventilation or contain the ventilation system to cool the data acquisition system.
- e) Shall have automatic pressure equalization valve - balances interior pressure, keeps water out.
- f) Shall have Comfortable rubber over-moulded handle.
- g) Easy open double throw latches.
- h) Stainless steel hardware and padlock protectors.
- i) Shall be portable.
- j) Shall have wheels.
- k) Shall have spring loaded handles.
- l) Shall be water tight.
- m) Shall be dust proof.

- n) Shall be crush proof.

3.2.4 Jerry Cans

The jerry can shall meet the following minimum requirements:

- a) Shall be 20 litre capacity
- b) Shall have flip over tight sealing lid
- c) Shall be made of steel/plastic
- d) Shall have the weight of approximately 3 Kg
- e) Shall be outdoor compatible

4 DOCUMENTATION

The documentation shall meet the following requirements:

- A. The equipment and its documentation shall be fully documented in English in compliance with Infrastructure (Signals) standard specification no. CSE-1159-001.
- B. Each of these products shall be delivered with safety material data sheet
- C. Invoice and delivery note shall be submitted with materials

5 LOGISTICS

- A. Materials shall be packaged as per manufactures requirements
- B. Materials not packaged as per manufacturers requirements will not be accepted

6 QUALITY ASSURANCE

- A. All proposed accessories shall be approved by Transnet Freight rail (technology management)

6.1 Tests and examinations

- A. An acceptance test procedure (ATP) for verification of compliance to the specification shall be drawn up by the contractor. This document shall be subject to approval by Technology Management.
- B. The contractor shall make any changes to the ATP, deemed necessary by Technology Management. Once approved, this ATP, together with the equipment specification shall be used to determine system compliance during commissioning.
- C. Supplier shall provide records of material inspection

- D. Supplier shall obtain record of specification compliance with respect to material supplied
- E. Supplier shall provide record of material data sheets for all material. Records mentioned shall be in a form of report.
- F. Transnet shall validate the report with material supplied

7 DELIVERY

- a) The delivered accessories and consumables must be ready for use.