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Tashi InfoComm Private Limited

TASHI INFOCOMM PRIVATE LIMITED (TIPL)

BIDDING DOCUMENT FOR THE SUPPLY OF

"Tools & Equipmen_FY-2024"

Bidding Document Ref# TIPL/PRO-07/2024/ 102

Date: 02 / 02 / 2024



[Handwritten signature]

Address: P.O Box # 1502, Samten Lam, Thimphu, Bhutan
Phone : +975 77889977 Website : www.tashicell.com



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Tashi InfoComm Private Limited

SECTION-I INVITATION OF BIDS

Bidding Document Ref# TIPL/PRO-07/2024/102

Dated 02 / 02 / 2024

For supply of: "Tools & Equipmen_FY-2024"

1. Tashi InfoComm Private Limited (TIPL) hereinafter referred to as the "Purchaser" invites sealed bids from the eligible Bidders for the supply of Tools & Equipment, 2024.
2. Interested Bidders may kindly visit our website www.tashicell.com to download the Bidding Document and obtain further information relating to the Bidding Document. Interested Bidders may also write to us at procurement@tashicell.com
3. All the expenses relating to the preparation and delivery of the Bidding Document are under the Bidders' scope.
4. Any correspondence relating to the Bidding Document shall be made in writing or an email to the following address. Enquiries through telephone shall not be entertained.

Address for communication/contact.

Manager,
Procurement & Inventory Section,
Tashi InfoComm Private Limited,
Norzin Lam, Post Box No-1502,
Thimphu, Bhutan.

Email: procurement@tashicell.com; manager.procurement@tashicell.com;





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SECTION-II INSTRUCTIONS TO BIDDERS

1. Scope of Bid

- 1.1. The scope of this Bidding Document shall be the supply of Tools & Equipment- FY 2024.
- 1.2. All the Bids are to be completed and submitted to the Purchaser in accordance with the Instructions to Bidders.

2. Eligibility & Exclusion

- 2.1. The invitation for Bid is open to all interested licensed national and global suppliers.
- 2.2. Bidders who do not have the requisite technical and financial capabilities to execute the supply of the Goods and Services stated in this Bidding Document shall NOT be allowed to bid.
- 2.3. Unless otherwise stated separately herein, the bidders are not required to furnish their financial and economic capacity to execute the supplies stated in this Bidding Document.
- 2.4. The Bidders are required to furnish their technical ability to execute these supplies stated in the Bidding Document.
- 2.5. Further, a Bidder shall be excluded from participation in this Bidding Document if:
 - i. A Bidder is Insolvent
 - ii. Is in receivership
 - iii. Is bankrupt
 - iv. In the process of being wound up
 - v. Has entered into an arrangement with the creditors
 - vi. Your business being administrated by the court, judicial officer, or a professional body
 - vii. Has not fulfilled its obligation of tax payment, or other dues in accordance with the laws of the country in which the bidder is established.
 - viii. If the bidder is debarred from participation in public procurement by any competent authority as per the relevant laws
 - ix. If the bidder has not fulfilled contractual obligations with the purchaser in the past.

3. Cost of Bidding

- 3.1. The Bidder(s) shall bear all costs associated with the preparation and delivery of its Bids, and the Purchaser shall in no case be responsible or liable for those costs.

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4. Bidding Documents, Alternative Bids, Modification, Withdrawal, Amendment and Cancellation of Bids

- 4.1. The purpose of this Bidding Document is to assist the interested Bidders in arriving at an informed decision on whether or not to submit a bid and to enable the interested bidders to prepare responsive bids.
- 4.2. The Bidding Document shall be made available through the Company website www.tashicell.com free of cost and shall be made secure to avoid any modifications to the Bidding Document without restricting access.
- 4.3. The minimum number of bid requirements shall be Three.
- 4.4. If the minimum number of bids received in response is less than three, the Management Tender Committee shall have the discretion to open the bids or not to open the bids. Such discretion to open the bids shall be justified by minuting the circumstances and situation for having exercised the discretion in the evaluation/comparative statement report.
- 4.5. The Management Tender Committee may also decide to extend the bid submission date and opening date based on the nature of the goods to be procured and their need-by-date. The Procurement Section shall notify the time extension through the company website and if necessary through mass media. The suppliers who have already submitted their bids shall be notified through email of the time extension and new bid opening date.
- 4.6. Further, the bidding process shall be considered valid irrespective of the number of bids received in response to this Bidding Document if:
 - a) The due process on the invitation of bids has been exhausted and or
 - b) If the project is on high priority and time is considered very crucial.
- 4.7. Prior to the deadline for bid submission stipulated in the Bidding Document, Bidders who have already submitted their bids, upon submission of a written application to the Procurement Section (Manager, Procurement & Inventory Section, Tashi InfoComm Private Limited, Thimphu), may withdraw their bid or modify it. For the re-submitted bids, the Bidder shall write "Modified" on the envelope. The "Modified" bids have to be submitted within the submission schedule stated in the Bidding Document.
- 4.8. The bids withdrawn shall not be accepted again.
- 4.9. Bidders shall not be allowed to withdraw nor modify the bids after the expiry of the date of submission of bids.
- 4.10. Unless the bids are unnecessary or do not give satisfactory results or there are major changes in the BOQ, TIPL shall avoid cancellation of the Bidding Document.
- 4.11. Bid Cancellation shall be justified if:





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- a) The requested goods are no longer needed
 - b) There is a substantial change in the requirement
 - c) Funding or Budget is no longer available
 - d) The continuation of the Bidding process is no longer in the best interest of the purchaser.
- 4.12. The Procurement Section shall promptly notify all the bidders who already submitted their bids in writing, via telephonic conversation, email, or any other means of expedited delivery should it become necessary to cancel the bids prior to the closing date for bid submission. Further, the Procurement Section shall evaluate the necessity to return the Bidding Document and maintain confidentiality depending on the nature and sensitivity of the document.
- 4.13. TIPL reserves the right to amend or modify the Bidding document for any reason by the issuance of an addendum either on its initiative or in response to a clarification request from bidders prior to the deadline for submission of bids.
- 4.14. The notice for amendment shall be published on the mass media company website and requires all interested bidders to go through the amendment, which will be part of the Bidding Document and shall be binding on them.
- 4.15. It shall be the responsibility of the prospective/interested bidders to regularly visit the company website for any amendment to the Bidding Document until the last date of the Bid Submission.
- 4.16. A suitable clause in the General Terms and Conditions shall be included in the Bidding Document that the Purchaser shall in no way be responsible for any ignorance of the Bidder about the amendment to the Bidding Document.
- 4.17. Based on the nature of the amendment issued, the Procurement Section may extend the bid submission deadline allowing the bidders reasonable time for taking the addendum/amendment into account in the preparation of their bids.
- 4.18. The bidders seeking clarification shall do so within 3 days prior to the date of bid submission as per the terms and conditions specified in **Section III: General Terms & Conditions**.
- 4.19. The Bidder may submit alternative bids with the following documents in a separate envelope marked as "Alternative Bid for Tender No: TIPL PRO-07/2024/02
dt- 02-02-2024.
- i) Price Schedule
 - ii) Datasheet
 - iii) Product Catalogue
 - iv) OEM Certificates, if required.
 - v) Any other relevant certificates/specifications, etc.



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5. Bid Prices

- 5.1. The Bidders shall complete the appropriate Price Schedule included herein, stating unit prices, extended amount, and the expected countries of origin of the Goods to be supplied, if applicable
- 5.2. Prices quoted by the Bidders shall remain fixed and valid for the period stated in **Section II, Clause 7** of the Bidding Document, and will not be subject to variation on any account.
- 5.3. The Bid Currency shall be Ngultrum (Nu) for this Bidding Document. Except for third-country Bidder(s), the Bidder(s) from the rest of the countries are not allowed to quote in US dollars or any other hard currency.
- 5.4. The third country Bidder(s) who quoted in US Dollars shall be converted into Ngultrum at the prevailing exchange rate (Selling TT rate of any financial institution OR RMA) as on the date of bid opening or the preceding date if the rate of exchange for date of bid opening is not available.
- 5.5. Bid price adjustment is not allowed in this Bidding Document.

6. Trade Terms

- 6.1. Unless otherwise stated, the following shall be the trade terms for this bidding document:
 - a) Bhutanese Bidders: DDP, TIPL Warehouse, Thimphu/Phuentsholing.
 - b) Indian Bidders: CIF, TIPL Warehouse, Phuentsholing.
 - c) Third Country Bidder: CIF, Kolkata, India.

7. Bid Validity

- 7.1. The Bids and the quoted price or unit rates shall be valid for 60 days from the date of opening of the Bids.
- 7.2. If the TIPL Tender Evaluation Committee is not able to complete the comparison and evaluation including the award of the contract due to reasons beyond its reasonable control, the Bids and its security including the validity of the security shall be extended without modification of its Bids.
- 7.3. Those Bidders not agreeing to the extension request shall be disqualified without forfeiting their Bid Security and the Bid shall no longer be considered for evaluation and award.





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11. Delivery

- 11.1. Delivery should be completed as per the given schedule:
- Within 60 days from the date of issuance of purchase order or signing of supply contract.
 - The detailed terms & conditions shall be mentioned in the confirmed Purchase Order/Supply Contract.
- 11.2. The purchaser (TIPL) may provide delivery time extension beyond the actual delivery date taking into account the actual need-by-day and project schedule of TIPL. However, subject to the instruction and approval of the Management Tender Committee.
- 11.3. The Time Extension request/provided may not exceed 15 days at the maximum OR depend on the approval granted by the Management Tender Committee of the purchaser. The supplier has to send an email/in writing requesting a time extension with genuine reasons (along with supporting documentation).
- 11.4. Depending on the instruction and approval of the Management Tender Committee, the supplier may be levied or exempted from the LD.

12. Inspection of Goods:

- 12.1. The goods are subject to Physical Inspection upon delivery at TIPL Warehouse and testing & commissioning in due course of time. The Goods found to be faulty, DOA, or not meeting specifications/requirements of TIPL after the final inspection, installation, and testing shall be rejected at the cost of the bidder.
- 12.2. Depending on the nature of the goods, the Tender Evaluation Committee may call for the inspection of the bidder's factories as part of the Bid Evaluation or Feasibility study. The cost for such shall be borne by the Purchaser. The Procurement Section shall notify in writing on which the inspection will be made if required.

13. Warranty (If applicable)

- 13.1. The Warranty shall be a minimum of 12 months from the date of delivery OR the standard manufacturer's warranty, whichever is longer.

14. Payment

- 14.1. The Payment shall be made 100% against delivery within 7 working days from the date of receiving the Bill/Invoice.





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- 14.2. Advance payment up to a maximum of 30% of the total PO value may be released at the Purchaser's discretion against furnishing an equivalent amount of bank guarantee for the advance payment valid 3-6 months beyond the delivery deadline.

15. TDS/FCT

- 15.1. TDS (Tax Deduction at Source) and or FCT (Foreign Contract Tax) shall be deducted as per the existing Rules and Regulations of the Department of Revenue & Customs, Bhutan (wherever applicable).

16. EMD (Earnest Money Deposit)

- 16.1. The bidder should submit **not less than 2% of the total quoted value** as part of the EMD along with the Bid in the form of a Demand Draft or Bank Guarantee from any of the financial institutions located in Bhutan. The bidder(s) other than Bhutanese national can furnish EMD from the financial institutions in their respective countries OR from any of the Bhutanese Financial Institutions. The EMD may be directly deposited into the Purchaser's bank account (please contact the Purchaser requesting bank details via email).
- 16.2. The bidder(s) failing to submit the EMD as per the requirement shall result in the rejection/cancellation of their bid.
- 16.3. The EMD shall be valid for 30 days beyond the submission deadline of the bidding document. The EMD should be drawn in favor of **"Tashi InfoComm Private Ltd., Samten Lam, Thimphu, Bhutan"**.
- 16.4. EMD of unsuccessful bidder(s) shall be returned within 15 days after the finalization of the Bid.
- 16.5. EMD shall be forfeited if:
- a) A bidder withdraws its bids prior to the finalization of the bids in every respect.
 - b) The successful bidder fails to submit Performance Security as per the terms specified in the bidding document.
 - c) The successful bidder fails to sign a contract or issue acceptance acknowledgment of purchase or work order within the prescribed time.
 - d) If a bidder does not accept the arithmetical corrections of its bid price.
- 16.6. EMD of the successful bidder shall be returned promptly upon submission of Performance Security.

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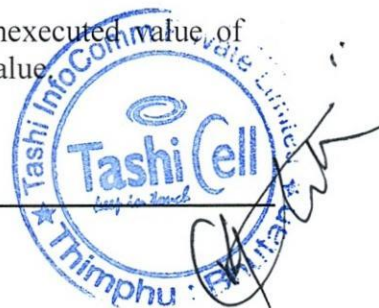
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17. Performance Security

- 17.1. The successful bidder should submit not less than 10% of the total purchase order value as Performance Security within 14 days after the issuance of the letter of acceptance and before the signing of the contract if required.
- 17.2. Performance Security shall be drawn in favor of “**Tashi InfoComm Private Ltd, Thimphu**” in the form of a Demand Draft or Bank Guarantee or can be deposited directly into the purchaser’s bank account(contact purchaser via email requesting bank details).
- 17.3. Performance Security shall be valid for **3 months beyond** the warranty period from the date of issuance of performance security by the financial institutes.
- 17.4. Failure of the successful bidder to submit the Performance Security within the prescribed time shall constitute sufficient grounds for the annulment of the issued purchase order and forfeiture of EMD. The purchase order may be issued to the second-lowest evaluated bidder.
- 17.5. Performance Security shall be returned within 1 week from the date of successful completion of all obligations under the issued Purchase Orders or after the expiration of the warranty period whichever is longer.
- 17.6. Performance Security shall be forfeited if:
 - a) The successful bidder fails to execute the supplies/works as per the terms and conditions stated in the purchase order in any manner deemed unsatisfactory by the purchaser (TIPL) or the end-user(s).
 - b) The successful bidder fails to deliver the goods on the given deadline and is not recommended by the end-user(s) for a time extension or replacement.
 - c) The goods supplied do not conform to the specifications/brands/requirements, etc stated in the purchase order/BOM.
 - d) If the bidder fails to remedy any reported defect within the warranty period, the purchaser shall be entitled to forfeit the performance security or to remedy the defect at the expense of the supplier.

18. Liquidated Damage (LD) Penalty

- 18.1. The Liquidated Damages shall be levied on the quantity of supplies delayed beyond the scheduled delivery deadline. LD shall be calculated on the total value of the items for which supplies have been delayed.
- 18.2. The LD penalty shall be charged at 0.1% per day of delay on the unexecuted value of supplies. The total amount of LD shall not exceed 10% of the total PO value.





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19. The purchaser Right

- 19.1. The Purchaser reserves the following rights without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform and explain the affected Bidder or Bidders on the grounds of the Purchaser's action:
- The right to accept or reject any Bid and reject all the Bids at any time prior to issuance of Award Notification and or Purchase Order.
 - The right at the time of award of the purchase order to increase or decrease the quantity of Goods specified in the Bidding Document, without any changes in the price or other terms & conditions (not exceeding 25% of the indicated quantity in the Bidding Document).
 - The right to reject all or in part, the item supplied during the time of physical inspection/testing or found to be non-standard/non-specific/unreliable in terms of quality/not meeting specification.
 - The right to direct negotiation, call quotations and receives the same via email from the manufacturers; authorized distributors; authorized dealers; and frequent supplier(s) of similar goods in Bhutan/India/China/Other countries to compare the rates with those offered by the vendors through this Bidding Document. If need be, to procure directly. The Purchaser also reserves the right to negotiate with the lowest evaluated bidder(s) or all of the bidders at any time prior to the award of the Purchase Order/Signing of the Supply Contract.
- 19.2. Should the selected Bidder(s) fail to supply the full order quantity within the given deadline, the purchaser reserves the right to cancel the quantities not supplied and place an order to the Second Lowest Evaluated Bidder. In such a case, the Purchaser shall recover as part of Liquidated Damages, the difference amount between the purchase order rate and the actual rate paid to the second-lowest evaluated bidder for the quantities not supplied. The amounts shall be either adjusted from the Performance Security or bill/invoice amount of the supplied quantity.

20. Force majeure

- 20.1. Force Majeure shall mean such unforeseeable occurrences beyond the control of the Purchaser and Bidder which occur after the date of issuance of Purchase Order or signing of Supply Contract and which were not reasonably foreseeable at the time of issuance of Purchase Order or signing of Supply Contract and which effects are not capable of being overcome without the unreasonable expense and/or loss of time to the Purchaser and the Bidder concerned, including, provided that the aforementioned conditions are met, but not limited to:
- Natural catastrophes, earthquakes

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- ii) Strikes and blockages
- iii) War or war-like conditions, mobilizations, revolutions or riots, the act of Public enemy, sabotage, terrorism.
- iv) Restriction by actions, omissions, or interventions from Public Authorities (including but not limited to changes in laws, regulations, import/export, security restrictions).
- v) The Party who wishes to plead Force Majeure shall inform the other party of the First party's perception of the effects of such force majeure on the fulfillment of the issued purchase order/signed Supply Contract. Should any event of force majeure cause an increase in the time required for the performance of any part of the purchase order/signed Supply Contract, an equivalent adjustment shall be made in the time required for performance.

However, if the force majeure situation continues for more than two months, the purchaser and bidder shall decide whether the contract should be terminated.

21. Termination

21.1. In the event of any failure by the Bidder to perform any of its obligations under the issued purchase order or signed Supply Contract or upon unsatisfactory performance, the purchaser may choose to terminate the purchase order or signed Supply Contract by giving a prior written notice of Fifteen (15) days, without any obligation to the Bidder. However, the purchaser shall pay the actual due amount for the quantity supplied and accepted by the Purchaser to the Bidder on termination of the issued purchase order or signed Supply Contract.

22. Indemnity

22.1. The bidder(s) shall comply with all the laws in force in Bhutan and outside. The laws will include all national, provincial, municipal, or other laws that affect the performance of the issued purchase orders or signed Supply contracts and bind upon the Bidder(s). The Bidder(s) shall indemnify and hold harmless the Purchaser for and against any and all the liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Bidder(s).

23. Dispute Settlement

23.1. If any dispute should arise in connection to the issued purchase order or signed Supply Contract, the Parties shall try to settle any such dispute through good faith and negotiations including escalation to senior Management where each party deems it appropriate. If negotiations fail, the matter shall be referred to the Court of Law.





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24. Governing Law and Jurisdiction

- 24.1. The terms and conditions in this Bidding Document or issued Purchase Order or signed Supply Contract shall be read and construed in accordance with the laws of the Kingdom of Bhutan and the District Court of Thimphu, Bhutan shall have jurisdiction over any disputes arising out of the Contract.



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SECTION-III GENERAL TERMS & CONDITIONS

- 1) In this Bidding Document, the following terms shall be interpreted as indicated below:
- i) The Bid: An offer to supply goods, services, or works made as per the terms and conditions set out in the invitation for such bids in the Bidding Document. The term "Bid" is synonymous with the term "Tender".
 - ii) The Bidder: Any eligible individual or legal entity who participates in the competitive bidding process.
 - iii) Bidding Document: The set of documents issued by the TIPL to potential bidders in which the proposed procurement specifications, terms, and conditions are prescribed. The terms "Bidding Document", "Tender Document", "Bid Document" and "Request for Proposal" shall be synonymous.
 - iv) Bill of Quantities (BOQ): The list of units and unit rates of the goods and services proposed for tendering purposes.
 - v) Day: Calendar Day
 - vi) Earnest Money Deposit (EMD): The deposit taken by TIPL along with the bid to ensure the capability of the bidder to perform their obligations under the bid. The term "Bid Security" shall be synonymous with the term "EMD".
 - vii) Invitation of Bids: A document published or notified by TIPL, which informs potential bidders that it intends to procure goods, services or works.
 - viii) Lowest Evaluated Bid: The bid that offers the best value of money if evaluated based on various objective criteria set out in the Bidding Document. It shall not necessarily mean the "Lowest quoted price".
 - ix) Liquidated Damage (LD): The amount that the supplier agrees to pay as damages if the party breaches an obligation, such as delay in delivery.
 - x) Price Schedule: A summary of quantity, measurement unit, unit price, and extended price of items to be procured under the contract or issued purchase order.
 - xi) Management Tender Committee: A committee responsible for supervising and ensuring that the procurement procedures outlined in this Bidding Document and or TIPL procurement manual are followed.
 - xii) Tender Evaluation Committee: Committee responsible for opening and evaluating bids.





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2) Bid Submission & Opening Schedule

- 2.1 The Bids should be submitted in a sealed envelope (Single Envelope Method- **copy not required**) addressed to “**Manager, Procurement & Inventory Section, TIPL** against Reference No. TIPL/PRO-07/A024/102..... dated 02/02/2024.....”.
- 2.2. **Bid Submission Date & Time:** 11:00 AM, 14/02/2024
- 2.3. **Bid Opening Date & Time:** 2:00 pm, 14/02/2024
- 2.4. Bidding Documents received after the deadline (time & date of submission) shall not be accepted and opened during the bid opening. The Bids shall automatically stand as “Rejected”.
- 2.5. The Purchaser shall not be responsible for any damages, losses, breakages, or shortages of any items while in transit for delivery of Goods to TIPL Store/warehouse.
- 2.6. The Bidder should enclose a Xerox copy of a valid Trade License, Tax clearance, Power of Attorney, and other relevant documents.

3) Clarification on Bidding Document

- 3.1 The Bidders are NOT allowed to seek any clarifications on the Bidding Document in person.
- 3.2 A prospective/interested bidder requiring any clarification of the Bidding Document may notify the Procurement Section in writing within 3 days prior to the last date of bid submission.
- 3.3 The Procurement Section shall respond to all the bidders as an addendum or amendment to the Bidding Document or to a bidder who sought further clarification through electronic means within 2 days from the date of receiving the request for clarification.
- 3.4 Any bid clarification request received after the last date of bid clarification shall not be accepted.
- 3.5 The bidder(s) are expected to examine the Terms and Conditions stated in the Bidding Document, Bill of Materials, Specifications, Drawings, etc furnished along with the Bidding Document. Once the bids are submitted by the bidder(s), It shall mean:
- a) The bidder(s) have examined, read, and accepted all the terms and conditions stated in the Bidding Document, the specifications of the goods/services, Drawings/Designs, etc furnished in the Bidding Document. Thereafter, no grievance, complaints, etc (whatsoever nature may be) shall be accepted.
- 4) The Bids not substantially responsive to the Bidding Document in every respect will result in the rejection of the Bids.

Address: P.O Box # 1502, Samten Lam, Thimphu, Bhutan
Phone : +975 77889977 Website : www.tashicell.com





བགྲིས་བད་དོན་བརྒྱུད་འབྲེལ་སྐྱེས་སྡེ་ཚང་འཛིན།།

Tashi InfoComm Private Limited

- 5) For any complaints or grievances, the bidder(s) may write directly to the Management Tender Committee of the Purchaser through email. The Email ID is **procurement@tashicell.com**.
- 6) Product samples, catalog/brochures containing details of technical and functional specifications shall be submitted along with the Bids wherever applicable. Failing which, shall result in rejection of the Bidding Document.
- 7) If the EMD amount is insufficient, the Bids shall automatically stand as “Rejected”.
- 8) The Bidders shall be permitted to submit bids by registered post or courier by hand or through electronic means.
- 9) Bidders are advised that the bids be delivered in an envelope (Marked as **“ORIGINAL” OR “ALTERNATIVE BIDS” OR “MODIFIED”**) sealed with adhesive tape or other sealants, which will prevent them from reopening, addressed to the appropriate addressee, and be marked as **“Confidential”, “Name of the Supply”, “Tender Number”,** and the words **“DO NOT OPEN BEFORE”** the specific date, month and time. **DO NOT SUBMIT A “COPY”**. However, bidders are advised to maintain a photocopy of their bidding document (sealed and signed copy) before submitting it to the purchaser and produce the copy during any event of discrepancies.
- 10) The decision of the Corporate/Management Tender Committee shall be final and binding.





བཀྲིས་བད་དོན་བརྒྱུད་འབྲེལ་སྐོར་ལྗོངས་ལོ་ཚད་འཛིན།།

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SECTION-IV

The complete **Bill of Materials (BOM)** is as stated in **Appendix I**. The Bids should be submitted in the below format in your company Quotation Form.

Appendix-I:

| S/L | Description | UoM | Qty | Unit Rate | Amount |
|-----|-----------------------------------|-----|-----|-----------|--------|
| 1. | 1. Details as given in Appendix I | | | | |
| | | | | | |

Total

Note:

1. Please attached details of the technical and functional specifications along with the Bidding Doc. Failing to do so, will result in the rejection of your bidding document.
2. Mention the Country of origin of goods in the bidding document.



Appendix-I: Tools & Equipment_2024

| S/L | Description | Specifications | Model/Brand | UoM | Qty | Department/Section | Remark |
|-----|-----------------------------|---|-------------------------------|-----|-----|--------------------|-------------------------|
| 1 | Drilling Machine | Cordless, Bosch-GSR 120 | | Nos | 2 | AND | Specifications attached |
| 2 | Heavy-Duty Drilling Machine | Heavy Duty, Bosch | | Nos | 1 | AND | Specifications attached |
| 3 | Ladder | Telescope, 250CM | | Nos | 14 | AND | Specifications attached |
| 4 | Ladder | A-Shape, 2.5mtrs | | Nos | 1 | AND | Specifications attached |
| 5 | Tourch | Rechargeable | | Nos | 1 | AND | Specifications attached |
| 6 | AirCon Machine | Air Conditioner Cleaner Machine | | Nos | 1 | AND | Specifications attached |
| 7 | Weldng Machine | Welding Machine, Cheston 200A Portable | | Nos | 1 | AND | Specifications attached |
| 8 | Fiber Splicing Tools | FSM 88s+ | Brand: Fujikura or Equivalent | Set | 2 | AND | Specifications attached |
| 9 | Fiber Splicing Tools | 33S | Brand: Fujikura or Equivalent | Set | 3 | | Specifications attached |
| 10 | Tool Box | PK-4028AI Telecom & Network Installation Kit. Package Dimensions: 19.5 x 14.7 x 6.9 inches; 22 pounds, Item No. PK-4028AI | Pro's Kit | Set | 1 | MIS | Specifications attached |



Specifications

| Item | Specification | |
|------------------------------|-----------------------------|--|
| Fiber alignment method | Active core alignment | |
| Fiber count can be spliced | Single fiber | |
| Applicable fiber | Fiber type | SMF(G.652/657), MMF(G.651), DSF(G.653), NZDSF(G.655) |
| | Cladding dia. | 80 to 150um |
| Applicable coating | Sheath clamp | Coating dia. : Max. 3.000um Cleave length : 5 to 16um |
| | Fiber holder | Coating dia. : Refer to options Cleave length : Approx. 10mm |
| Fiber splice performance | Splice loss | ITU-T G.652 : Avg. 0.02dB |
| | | ITU-T G.651 : Avg. 0.01dB |
| | | ITU-T G.653 : Avg. 0.04dB |
| | | ITU-T G.654 : Avg. 0.04dB |
| | | ITU-T G.655 : Avg. 0.04dB |
| Splice time | Typical 7 sec. | |
| Applicable protection sleeve | Sleeve type | Heat shrinkable sleeve |
| | Sleeve length | Max. 66mm |
| | Sleeve dia. | Max. 6.0mm before shrinking |
| Sleeve heat performance | Heat time | Typical 9 sec. |
| Fiber tensile test force | Approx. 2.0N | |
| Electrode life | Approx. 5,000 splices | |
| Physical description | Dimensions WxDXH | 170 x 173 x 150 mm without projection |
| | Weight | Approx. 2.8kg including battery |
| Environmental condition | Temperature | Operate : -10 to 50°C Storage : -40 to 80°C |
| | Humidity | Operate : 0 to 95%RH non-condensing Storage : 0 to 95%RH non-condensing |
| | Altitude | Max. 5,000m |
| AC adaptor | Input | AC100 to 240V, 50/60Hz, Max. 1.5A |
| | Output | Approx. DC 12V, Max. 7A |
| DC adaptor | Input | DC10 to 15V, Max.7A |
| | Type | Rechargeable Lithium Ion |
| Battery pack | Output | Approx. DC14.4V / 6,380mAh |
| | Capacity | Approx. 300 splice and heat cycles |
| | Temperature | Operate : -10 to 50°C |
| | | Recharge : 0 to 40°C |
| | | Storage : -20 to 30°C |
| Recharge | 5 to 8 hours from empty | |
| Battery life | Approx. 500 recharge cycles | |
| Display | LCD monitor | TFT 4.9 inches with touch screen |
| | Magnification | 200 to 320x |
| Illumination | V-grooves | LED lamp |
| Interface | PC | USB2.0 Mini B type |
| | External LED lamp | USB2.0 A type Approx. DC5V, 500mA |
| | Ribbon Stripper | Mini DIN 6pin DC12V, Max. 1A |
| | Wireless *1 | Bluetooth 4.1 LE |
| Data storage | Splice mode | 100 splice modes |
| | Heat mode | 30 heat modes |
| | Splice result | 20,000 splices |
| | Splice image | 100 images |
| Screw hole for tripod | | 1/4-20UNC |
| Other features | Automatic functions | Splice mode select by fiber type analysis |
| | | Fusion control |
| | | Wind protector : open/close |
| | | Sheath clamp : open |
| | | Splice start |
| | | Heater lid : open/close |
| | | Heater clamp : open/close |
| | | Heater start |
| | | Special splice |
| | Reference guide | Video and PDF file stored in splicer |
| | Sheath clamp | Easy sleeve positioning clamp |
| | Electrode | Replaceable without tool |
| | Software for PC | Splicer firmware update via internet |
| | | Parameter upload and download |
| | | Operating splicer with PC |
| Splice image download to PC | | |

88S+ Standard package

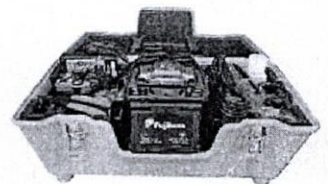
| Description | Model No. | Qty |
|---|--------------|-------|
| (1) Core alignment fusion splicer | 88S+ | 1pc |
| (2) Battery pack ² | BTR-15 | 1pc |
| (3) AC adaptor | ADC-20 | 1pc |
| (4) AC power cord | ACC-15 | 1pc |
| (5) USB cable | USB-01 | 1pc |
| (6) Fusion splicer strap | ST-02 | 1pc |
| (7) Electrodes (spare) | ELCT2-16B | 1pair |
| (8) Fiber holder set plate | SP-03 | 1pair |
| (9) Carrying case | CC-39 | 1pc |
| (10) Work tray left | WT-09L | 1pc |
| (11) Work tray right | WT-09R | 1pc |
| (12) Work tray J-plate | JP-09 | 1pc |
| (13) Tripod screw | TS-03 | 2pcs |
| (14) Alcohol dispenser | AP-02 | 1pc |
| (15) Quick reference guide | QRG-02-E | 1pc |
| (16) Wireless, PC and clamp setting guide | SG-03-E | 1pc |
| (17) Warning and cautions | WAC-01-E | 1pc |
| (18) Splice test report | Only english | 1pc |
| (19) Single fiber stripper | SS03 | 1pc |
| (20) Optical fiber cleaver | CT-50 | 1pc |
| (21) Fiber scrap collector | FDB-05 | 1pc |
| (22) Fiber setting plate | AD-10-M24 | 1pc |
| (23) Instruction manual | M-CT50-E | 1pc |
| (24) Carrying case strap | ST-03 | 1pc |

88S+ Options

| Item | Model | Remark |
|----------------|-------------|--|
| Fiber holder | FH-70-200 | 200um coating diameter |
| | FH-70-250 | 250um coating diameter |
| | FH-70-900 | 900um coating diameter |
| | FH-70-160 | 160um coating diameter |
| | FH-70-500 | 500um coating diameter |
| | FH-60-DC250 | 250um in drop wire cable |
| | FH-FC-20 | 900um in 2mm diameter cable |
| | FH-FC-30 | 900um in 3mm diameter cable |
| | FH-60-LT900 | 900um loose buffer cable |
| DC Adapter | DCA-03 | Connect AC adaptor not through battery |
| DC power cord | DCC-20 | Car cigar socket to BTR-15/DCA-03 |
| | DCC-21 | Car battery to BTR-15/DCA-03 |
| Transfer Clamp | CLAMP-DC-12 | Transferring drop cable on work tray |
| J-Plate | JP-10 | Attaching to splicer, not to work tray |
| | JP-10-FC | JP-10 with fiber clamps |

*1: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

*2: Please follow IATA regulation when shipping the battery by air.



Please visit our web site!

<https://www.keithelectronics.in>

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Jitendra Sharma

Contact No. 9954709701

WhatsApp No. 9678443340



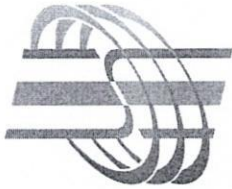
TYPE-82C+



High Definition Core Aligning
fusion splicer

TYPE-82C+

Powered by



NanoTune™
Enhanced splice experience



SumiCloud™

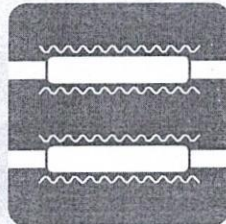


Dependable

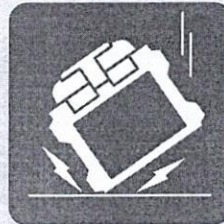
Splicing 5s/Heating 8s/Splice loss 0.01dB



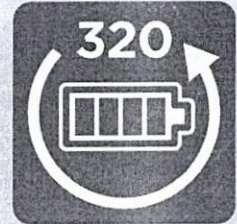
Preventive
Maintenance



Dual speed
high heating



Proven field
toughness



Long life
battery



Specifications

| Items | | TYPE-82C+ |
|----------------------------|---|--|
| Optical fiber requirements | Material | Silica glass |
| | Fiber count / Profile types | Single / SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655), BIF(G.657), CSF(G.654), EDF |
| | Fiber diameter | Cladding diameter : 80 - 150µm, Coating diameter : 100 - 1,000µm |
| | Cleave length | 5 - 16mm with coating clamp |
| Standard performance | Splice loss (typical)* | SMF : 0.01dB, MMF : 0.01dB, DSF : 0.03dB, NZDSF : 0.03dB |
| | Return loss (typical) | 60dB or greater |
| | Splice time (typical) | 5sec(SM G652 Quick Mode), 7sec(SM G652 Std. Mode), 7sec(Auto Mode) |
| | Heating time (typical) | 8sec (FPS-61-2.6 sleeve, S60mm 0.25 Quick Mode) |
| | Splice & Heat cycles per battery full charge** | Approx. 320 (BU-16) |
| | Fiber view & magnification | 2 CMOS cameras observation, 380X (zoom : 760X) for X or Y single axis view, 270X for both X & Y dual axis view |
| | Proof test | 1.96 - 2.09N |
| Programs | Applicable protection sleeve | 60mm, 40mm & Sumitomo Nano sleeves |
| | Splice programs | Max. 300, 74 are pre-optimised, 226 editable by user |
| Functions | Heating programs | Max. 100, 27 are pre-optimised, 73 editable by user |
| | Splice image capture / Splice data storage | 200 images / 10,000 splice data (internal memory only) 50,200/20,000 (with 8GB SD card) |
| | Attenuation splicing | 0.1dB to 15dB in 0.1dB increments |
| | Universal clamps | Provided, 200µm, 900µm tight & loose buffer fiber |
| | Reversible coating clamps | Provided |
| | Dual automatic independent ovens | Provided |
| | User-selectable oven clamp operation | Provided |
| | Onboard user training video | Provided |
| | Automatic fiber identification | SMF / MMF / DSF / NZDSF / BIF / Other |
| | Automatic arc calibration | Automatically compensates for environmental condition changes |
| Size / Weight | Display of remaining Splice & Heat cycles | Provided (Battery mode) |
| | Wireless LAN connectivity (Option)** | Provided |
| Terminals | Size | 128(W) x 154(D) x 130(H) mm (without anti-shock rubber) |
| | Weight | 1.9kg (without Battery) / 2.2kg (with Battery BU-16) |
| | Monitor | 5.0" touch screen color LCD display |
| Power supply | DC output | DC 12V (for JR-6+) |
| | USB port | USB 2.0 (mini-B type) |
| | Storage media | SD / SDHC memory card MAX32GB |
| Operating condition | AC input | AC 100 - 240V, 50/60Hz (ADC-16) |
| | DC input | DC 10 - 15V |
| Storage condition | Battery pack | Li-ion 10.8V, 6,400mAh (BU-16) |
| | Altitude | Altitude : 0 - 6,000m, Temperature : -10 - +50°C, Humidity : 0 - 95% (non-condensing), Wind velocity : up to 15m/sec |
| Electrode life** | Temperature | Temperature : -40 - +80°C, Humidity : 0 - 95% (non-condensing), Battery : -20 - +30°C (long term) |
| Software updates | 6,000 arc discharges | Internet |
| Data management | Can be stored, edited and analyzed by dedicated PC software | |

*1 : Average value of the final inspection in room temperature with Sumitomo identical fiber. Measured by cut-back method relevant to ITU-T and IEC standards.

*2 : Splice & Heat cycles may vary depending on the battery status and the operating environment.

*3 : Wireless LAN connectivity is not available in all countries. For more details, please refer to our Web site. <https://global-sei.com/sumitomo-electric-splacers/asia/products/sumicloud/>

*4 : Achieved in lab condition. Electrode life may vary depending on the operating environment.

Environmental Durability*

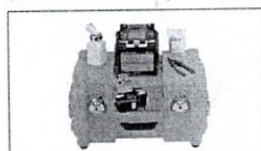
| Test details | Test details |
|-------------------|---|
| Shock resistance | Drop from 76cm on 5 faces (excluding top face) |
| Impact resistance | Equivalent to IK07 on LCD monitor (Protected against 2J impact, it is equivalent to a 500g force from 40cm) |
| Water resistance | Equivalent to IPx2 (Operates normally after being exposed to water dripping at 3mm/min, for at least 2.5 min on each of 4 surfaces tilted at 15°) |
| Dust resistance | Equivalent to IP5x (Operates normally after 8 hours in a test chamber with circulating dust particles smaller than 75µm) |

*Splicer operation after shock, impact, water or dust tests, was confirmed under battery power, by Sumitomo. Does not guarantee the product will not be damaged by these conditions.

Basic Accessories

| Part name | Part No. | Qty. |
|------------------------------|---------------|--------|
| AC adapter | ADC-16 series | 1 pc |
| AC power cord | PC-AC<X>* | 1 pc |
| Cooling tray | — | 1 pc |
| Spare electrode | ER-10 | 1 pair |
| Quick reference guide | — | 1 pc |
| Carrying case with worktable | CC-82 | 1 pc |
| Hand strap | — | 1 pc |
| USB cable | — | 1 pc |

*X=2(USA), 3(EU), 4(JP), 5(UK/HK), 8(CHINA), 9(INDIA), 10(BRAZIL)
Items listed in Basic Accessories are always included with the splicer body. Overall kit content may vary regionally. Please check with your local authorised reseller to confirm kit content in your region.



Carrying case with worktable
CC-82



Handy cleaver
FC-8R series

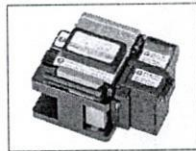
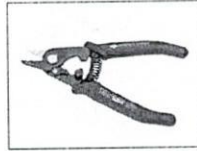
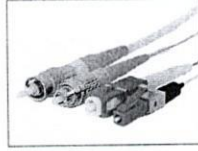


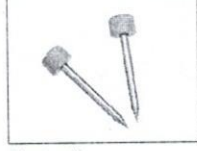
Table-top cleaver
FC-6 / FC-6R series



Jacket remover
JR-M03



Compatible with
Lynx-CustomFit™
Splice-on Connector



Electrode
ER-10

Accessories

| Part name | Part No. | Remarks |
|-------------------------|-------------|---|
| SumiCloud Card | WLS0 series | For SumiCloud™ connection |
| Fiber holder | FHS-025 | For φ0.25mm single fiber |
| | FHS-09 | For φ0.9mm single fiber |
| | FHS-025/LB5 | For 0.9mm loose buffered single fiber |
| | FHD-1 | For drop/indoor cable (Cable size : typical 2.0 x 3.1 or 2.6mm) |
| Battery pack | 15M-ST | For indoor cable (Cable size : typical 1.6 x 2.0mm) |
| | FHC-3 | For 3mm cable |
| | BU-16 | Li-ion 6,400mAh |
| Battery charger | BC-16 | — |
| Car battery cable | PCV-16 | For car battery operation (cigarette socket type) |
| V-groove cleaning brush | VGT-2 | Brush for cleaning V-groove |
| Electrode | ER-10 | — |
| Handheld fiber cleaver | FC-8R-FC | Automatic blade rotation cleaver with cleave counter |
| | FC-8R-F | Automatic blade rotation cleaver |
| Fiber cleaver | FC-6S-C | Table-top high precision cleaver |
| | FC-6RS-C | Automatic blade rotation cleaver |
| Jacket remover | JR-M03 | Jacket remover for single fiber |
| Loose tube cutter | LTC-01 | — |
| Alcohol dispenser | HR-3 | — |
| Fiber protection sleeve | FPS-1 | 60mm, diameter after shrink approx. φ3.2mm |
| | FPS-40 | 40mm, diameter after shrink approx. φ3.2mm |
| | FPS-61-2.6 | 61mm, diameter after shrink approx. φ2.6mm |

Sumitomo Electric Industries, Ltd.



Please contact us Mail to : fs-inquiry-sml@list.sei.jp

■ Specifications are subject to change without prior notice.
■ The fusion splicer and related accessories are not IT network equipments.

Designed in Japan
082C+01-ASIA-ENO02 (2022.11)

33S Specifications

| Item | Specification | |
|------------------------------|--|---|
| Fiber alignment method | Active clad alignment | |
| Fiber count can be spliced | Single fiber | |
| Applicable fiber | Fiber type | Single mode optical fiber Multi mode optical fiber |
| | Cladding dia. | Approx. 125µm |
| Applicable coating | Sheath clamp | Coating dia. : Max. 3000µm Cleave length : 5 to 16mm *1 |
| | Fiber splice performance | Splice loss *2 |
| ITU-T G.651 : Avg. 0.01dB | | |
| ITU-T G.653 : Avg. 0.05dB | | |
| ITU-T G.655 : Avg. 0.05dB | | |
| ITU-T G.657 : Avg. 0.03dB | | |
| Applicable Protection sleeve | Splice time *3 | SM FAST mode : Avg. 6 to 7sec. |
| | Sleeve type | Heat shrinkable sleeve |
| | Sleeve length | Max. 66mm |
| Sleeve heat performance | Sleeve dia. | Max. 6.0mm before shrinking |
| | | Heat time *4 |
| Fiber tensile test force | Approx. 2.0N | |
| Electrode life *5 | Approx. 6,000 splices | |
| Physical description | Dimensions W | Approx. 131mm without projection |
| | Dimensions D | Approx. 123mm without projection |
| | Dimensions H | Approx. 121mm without projection |
| | Weight | Approx. 1.4kg including battery |
| Environmental condition | Temperature | Operate: -10 to 50 °C Storage: -40 to 80 °C |
| | | Humidity |
| | Altitude | Max. 5000m |
| AC adaptor | Input | AC100 to 240V, 50/60Hz, Max. 1A |
| Battery pack | Type | Rechargeable Lithium Ion |
| | Output | Approx. DC14.4V, 3190mAh |
| | Splice time *3 | 60mm mode : Avg. 6 to 7sec. SM FAST mode : Avg. 6 to 7sec. Approx. 200 splice and heat cycles |
| | Capacity *6 | 60mm slim mode : Approx. 230 splice and heat cycles |
| Temperature | Recharge: 0 to 40 °C Long Term Storage : -20 to 30 °C | |
| | Battery life *7 | Approx. 500 recharge cycles |
| Display | LCD monitor | TFT 4.95 inches with touch screen |
| Magnification | Approx. 132 to 300x | |
| | LED lamp | |
| Illumination | V-grooves | LED lamp |
| | PC | USB2.0 Mini B type |
| Interface | External LED lamp | USB2.0 A type Approx. DC5V, 500mA |
| | Splice mode | 100 splice modes |
| Data storage | Heat mode | 30 heat modes |
| | Splice result | 20,000 splices |
| | Splice image | 100 images |
| | Screw hole for tripod | 1/4-20UNC |
| Other features | Reference guide | PDF file stored in splicer Open with/without Wind Protector Close with fiber setting Easy sleeve positioning clamp |
| | Sheath clamp | Replaceable without tool |
| | Electrode | |
| | | |

33S Standard package

| Item | Model | Qty |
|-------------------------------|--------------------------|--------|
| Clad Alignment Fusion Splicer | 33S | 1 pc |
| (1) Battery Pack * | BTR-17 | 1 pc |
| (2) AC Adapter | ADC-21 | 1 pc |
| (3) AC Power Cord | ACC-08, 09, 10, 11 or 12 | 1 pc |
| (4) USB Cable | USB-01 | 1 pc |
| (5) Electrodes, for spare | ELCT2-16B | 1 pair |
| (6) Carrying Case | CC-44 | 1 pc |
| (7) PC Setting Guide | SG-09-E | 1 pc |
| (8) Warning and Cautions | WAC-02-E | 1 pc |
| (9) Splice Test Report | | 1 pc |
| (10) Instructional Manual | M-CT16-E | 1 pc |
| (11) Quick Reference Guide | QRG-08-E, C or J | 1 pc |
| Single Fiber Stripper | SS05 | 1 pc |
| Optical Fiber Cleaver | CT16 | 1 pc |
| (1) Fiber Scrap Collector | FBD-06 | 1 pc |
| (2) Fiber Setting Plate | AD-16A | 1 pc |
| (3) Hexagonal Wrench | HEX-01 | 1 pc |

* Please follow IATA regulation when shipping the battery by air

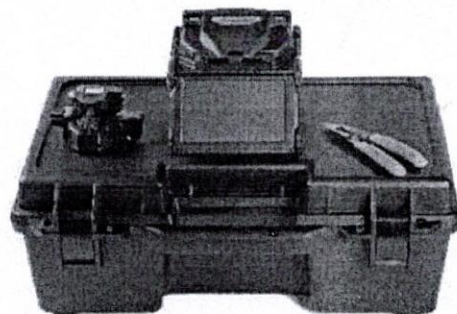
33S Options

| Item | Model | Remarks |
|------------------------|-------------|--------------------------------------|
| Fiber Holder | FH-70-200 | 200µm coating diameter |
| | FH-70-250 | 250µm coating diameter |
| | FH-70-900 | 900µm coating diameter |
| | FH-FC-20 | 900µm in 2mm diameter cable |
| | FH-FC-30 | 900µm in 3mm diameter cable |
| Sheath Clamp | CLAMP-S35B | 900µm loose buffer cable |
| Fiber holder set plate | SP-04 | Fiber holder set base |
| Transfer Clamp | CLAMP-DC-12 | Transferring drop cable on work tray |
| Protection sleeve | FP-03 | 60mm, Max. 900µm coating diameter |
| | FP-03(L=40) | 40mm, Max. 900µm coating diameter |

Please visit our web site!

<https://www.keithelectronics.com>

TOLL FREE NO.: 1800 1020 429



Keith Electronics Pvt. Ltd.

Jitendra Sharma
Contact No. 9954709701
WhatsApp No. 9678443340

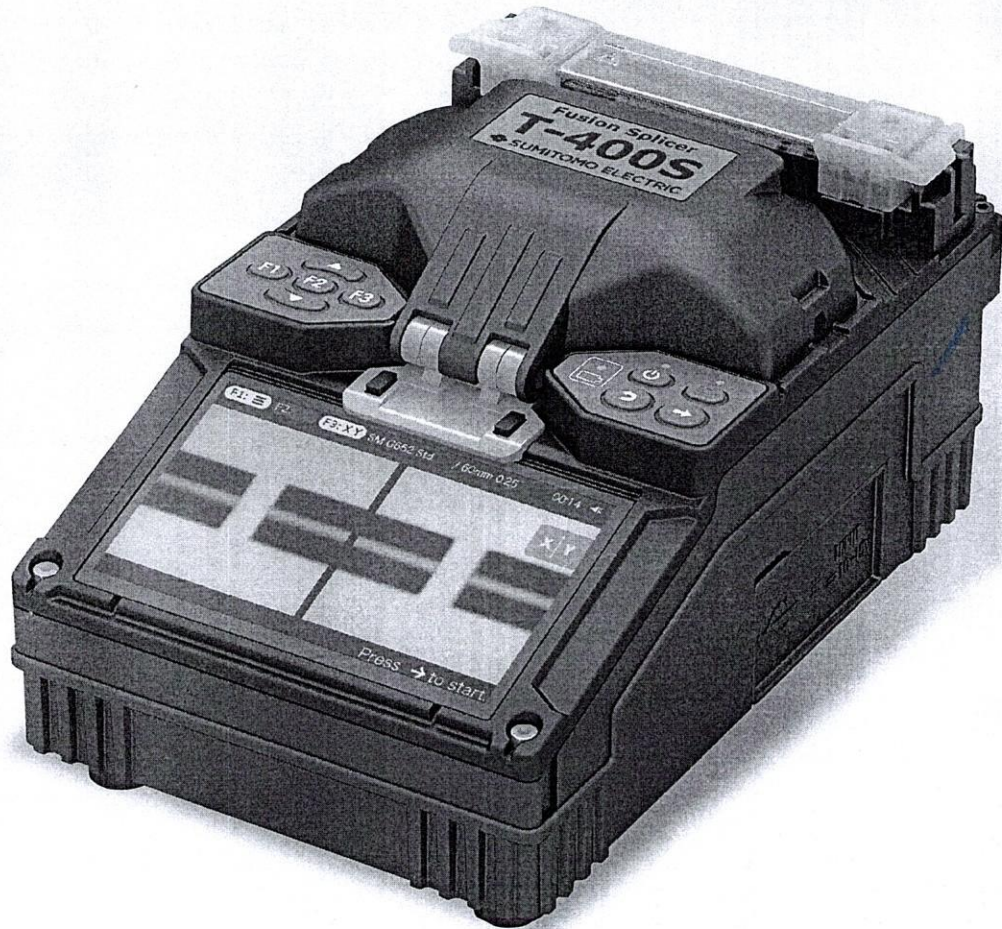
Guwahati
Assam





Active V-groove Fusion Splicer

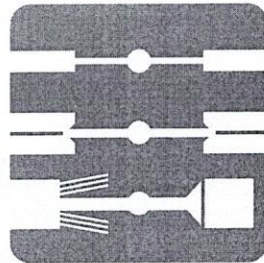
T-400S



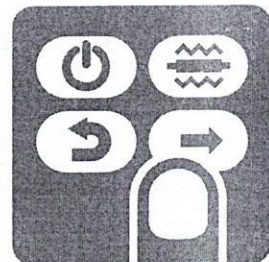
Fast, Versatile, Easy



Carry out your mission as fast as possible



All the FTTx fiber splices in one machine



Simple operation by brand-new user interface

Specifications

| Items | | T-400S |
|----------------------------|---|---|
| Optical fiber requirements | Material | Silica glass |
| | Fiber count / Profile types Fiber diameter Cleave length | Single / SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655), BIF(G.657) Cladding diameter : 125µm, Coating diameter : Up to 3mm by multi clamp 5 to 16mm for single fiber, 8mm for drop cable |
| Standard performance | Splice loss (typical)*1 | SMF : 0.03dB, MMF : 0.01dB, DSF : 0.05dB, NZDSF : 0.05dB |
| | Return loss (typical) | 60dB or greater |
| | Splice time (typical) | 7sec (SM G652 Quick Mode) |
| | Heating time (typical) | 24sec (FPS-61-2.6 sleeve, S60mm 0.25 Mode) |
| | Splice & Heat cycles per battery full charge*2 | Approx. 200 (BU-15) |
| | Fiber view & magnification | 2 CMOS cameras observation, 200X Max. |
| | Proof test | 1.96 - 2.09N |
| Programs | Applicable protection sleeve | 60mm, 40mm & Sumitomo Nano sleeves |
| | Splice programs Heating programs | Max. 150, 11 are pre-optimised, 100 editable by user (39 to be pre-optimised) Max. 50, 11 are pre-optimised, 20 editable by user (19 to be pre-optimised) |
| Functions | Splice image capture / Splice data storage | 100 images / 10,000 splice data (internal memory only) |
| | Auto-start | Splice/Heating |
| | Multi clamp | Provided, applicable for 250 & 900µm coated fiber, 2 & 3mm jacket cord and rectangular drop cable |
| | Heater clamp for splice on connector Automatic arc calibration | Provided Automatically compensates for environmental condition changes |
| Size / Weight | Size | 129(W) x 195(D) x 99(H) mm (without protrusion) |
| | Weight | 1.2kg (without Battery), 1.3kg (with Battery BU-15) |
| | Monitor | 4.3" color LCD display |
| Terminals | USB port | USB 2.0 (mini-B type) |
| Power supply | AC input | AC 100 - 240V, 50/60Hz (ADC-15) |
| | DC input | DC 10 - 15V |
| | Battery pack | Li-ion 10.8V, 35.64Wh (BU-15) |
| Operating condition | | Altitude : 0 - 5,000m, Temperature : -10 - +50°C, Humidity : 0 - 95%RH (non-condensing), Wind velocity : up to 15m/sec |
| Storage condition | | Temperature : -40 - +80°C, Humidity : 0 - 95%RH (non-condensing), Battery : -20 - +30°C (long term) |
| Electrode life *3 | | 6,000 arc discharges |
| Software updates | | Internet |

*1 : Average value of the final inspection in room temperature with Sumitomo identical fiber. Measured by cut-back method relevant to ITU-T and IEC standards.

*2 : Splice & Heat cycles may vary depending on the battery status and the operating environment.

*3 : Achieved in lab condition. Electrode life may vary depending on the operating environment.

Environmental Durability*

| | Test details |
|------------------|---|
| Shock resistance | Drop from 76cm on bottom face only |
| Water resistance | Equivalent to IPX1 Operates normally after being exposed to vertically dripping water at 1mm/min for 10 min |
| Dust resistance | Equivalent to IP5X Operates normally after 8 hours in a test chamber with circulating dust particles smaller than 75µm |

*Confirms the battery operation in tests carried out by Sumitomo. Does not guarantee that the product is free of faults or damage.

Basic Accessories

| Part name | Part No. | Qty. |
|-----------------------|---------------|------|
| AC adapter | ADC-15 | 1 pc |
| AC power cord | PC-AC<X>* -2P | 1 pc |
| Battery pack | BU-15 | 1 pc |
| Quick reference guide | — | 1 pc |
| Carrying case | CC-15 | 1 pc |

*X=2(USA), 3(EU), 4(JP), 6(AUS), 8(CHINA)
At least, the above basic accessories come with splicer main body.
Some additional accessories may be or may not be included as a splicer standard kit contents. The standard splicer kit contents varies in each region/country.
Please ask details to your nearest distributors.

Accessories

| | Part name | Part No. | Remarks |
|-------------------------|-------------------------|--|---|
| Accessories for Splicer | Fiber holder | FHS-025/LB5 FHS-SOC | For 0.9mm loose buffered single fiber Connector holder |
| | Battery pack | BU-15 | Li-ion 10.8V, 35.64Wh |
| | Car battery cable | PC-V25 | For car battery operation (cigarette socket type) |
| | V-groove cleaning brush | VG-2 | Brush for cleaning V-groove |
| | Electrode | ER-10 | — |
| | Work table | WT-15 | Handy table with neck strap |
| Accessories | Fiber cleaver | FC-5S FC-6S-C FC-6RS-C | Table-top cleaver Table-top high precision cleaver Automatic blade rotation cleaver |
| | Handheld fiber cleaver | FC-8R-FC | Automatic blade rotation cleaver with counter |
| | | FC-8R-F | Automatic blade rotation cleaver (without counter) |
| | Jacket remover | JR-M03 | Jacket remover for single fiber |
| | Loose tube cutter | LTC-01 | — |
| | Alcohol dispenser | HR-3 | — |
| | Fiber protection sleeve | FPS-1 | 60mm, diameter after shrink approx. 3.2mm |
| | | FPS-40 | 40mm, diameter after shrink approx. 3.2mm |
| FPS-61-2.6 FPS-D60 | | 61mm, diameter after shrink approx. 2.6mm 60mm For drop and indoor cables | |



Carrying case
CC-15

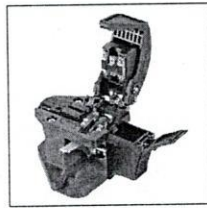
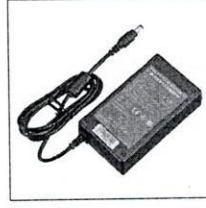


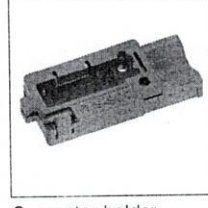
Table-top cleaver
FC-5S



Battery pack
BU-15



AC adapter
ADC-15



Connector holder
FHS-SOC



Electrode
ER-10

SUMITOMO ELECTRIC INDUSTRIES, LTD.

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■ Specifications are subject to change without prior notice.

Designed in Japan
400S01-GLOB-EN002 (2016.07)
(TP)

Specifications

| Item | Specification | |
|------------------------------|--------------------------------------|--|
| Fiber alignment method | Active core alignment | |
| Fiber count can be spliced | Single fiber | |
| Applicable fiber | Fiber type | SMF(G.652/657), MMF(G.651), DSF(G.653), NZDSF(G.655) |
| | Cladding dia. | 80 to 150um |
| Applicable coating | Sheath clamp | Coating dia. : Max. 3,000um Cleave length : 5 to 16um |
| | Fiber holder | Coating dia. : Refer to options Cleave length : Approx. 10mm |
| Fiber splice performance | Splice loss | ITU-T G.652 : Avg. 0.02dB |
| | | ITU-T G.651 : Avg. 0.01dB |
| | | ITU-T G.653 : Avg. 0.04dB |
| | | ITU-T G.654 : Avg. 0.04dB |
| | | ITU-T G.655 : Avg. 0.04dB |
| Splice time | Typical 7 sec. | |
| Applicable protection sleeve | Sleeve type | Heat shrinkable sleeve |
| | Sleeve length | Max. 66mm |
| | Sleeve dia. | Max. 6.0mm before shrinking |
| Sleeve heat performance | Heat time | Typical 9 sec. |
| Fiber tensile test force | Approx. 2.0N | |
| Electrode life | Approx. 5,000 splices | |
| Physical description | Dimensions WxDXH | 170 x 173 x 150 mm without projection |
| | Weight | Approx. 2.8kg including battery |
| Environmental condition | Temperature | Operate : -10 to 50°C Storage : -40 to 80°C |
| | Humidity | Operate : 0 to 95%RH non-condensing Storage : 0 to 95%RH non-condensing |
| | Altitude | Max. 5,000m |
| AC adaptor | Input | AC100 to 240V, 50/60Hz, Max. 1.5A |
| | Output | Approx. DC 12V, Max. 7A |
| DC adaptor | Input | DC10 to 15V, Max. 7A |
| | Output | DC14.4V / 6,380mAh |
| Battery pack | Type | Rechargeable Lithium Ion |
| | Capacity | Approx. 300 splice and heat cycles |
| | Temperature | Operate : -10 to 50°C |
| | | Recharge : 0 to 40°C |
| | | Storage : -20 to 30°C |
| Recharge | 5 to 8 hours from empty | |
| Battery life | Approx. 500 recharge cycles | |
| Display | LCD monitor | TFT 4.9 inches with touch screen |
| | Magnification | 200 to 320x |
| Illumination | V-grooves | LED lamp |
| | PC | USB2.0 Mini B type |
| Interface | External LED lamp | USB2.0 A type |
| | Ribbon Stripper | Approx. DC5V, 500mA |
| | Wireless *1 | Mini DIN 6pin DC12V, Max. 1A |
| | | Bluetooth 4.1 LE |
| Data storage | Splice mode | 100 splice modes |
| | Heat mode | 30 heat modes |
| | Splice result | 20,000 splices |
| | Splice image | 100 images |
| Screw hole for tripod | 1/4-20UNC | |
| Other features | Automatic functions | Splice mode select by fiber type analysis |
| | | Fusion control |
| | | Wind protector : open/close |
| | | Sheath clamp : open |
| | | Splice start |
| | | Heater lid : open/close |
| | | Heater clamp : open/close |
| | Heater start | |
| | Special splice | Attenuation splice |
| | Reference guide | Video and PDF file stored in splicer |
| | Sheath clamp | Easy sleeve positioning clamp |
| | Electrode | Replaceable without tool |
| Software for PC | Splicer firmware update via internet | |
| | Parameter upload and download | |
| | Operating splicer with PC | |
| Splice image download to PC | | |

88S+ Standard package

| Description | Model No. | Qty |
|---|--------------|-------|
| (1) Core alignment fusion splicer | 88S+ | 1pc |
| (2) Battery pack | BTR-15 | 1pc |
| (3) AC adapter | ADC-20 | 1pc |
| (4) AC power cord | ACC-15 | 1pc |
| (5) USB cable | USB-01 | 1pc |
| (6) Fusion splicer strap | ST-02 | 1pc |
| (7) Electrodes (spare) | ELCT2-16B | 1pair |
| (8) Fiber holder set plate | SP-03 | 1pair |
| (9) Carrying case | CC-39 | 1pc |
| (10) Work tray left | WT-09L | 1pc |
| (11) Work tray right | WT-09R | 1pc |
| (12) Work tray J-plate | JP-09 | 1pc |
| (13) Tripod screw | TS-03 | 2pcs |
| (14) Alcohol dispenser | AP-02 | 1pc |
| (15) Quick reference guide | QRG-02-E | 1pc |
| (16) Wireless, PC and clamp setting guide | SG-03-E | 1pc |
| (17) Warning and cautions | WAC-01-E | 1pc |
| (18) Splice test report | Only english | 1pc |
| (19) Single fiber stripper | SS03 | 1pc |
| (20) Optical fiber cleaver | CT-50 | 1pc |
| (21) Fiber scrap collector | FDB-05 | 1pc |
| (22) Fiber setting plate | AD-10-M24 | 1pc |
| (23) Instruction manual | M-CT50-E | 1pc |
| (24) Carrying case strap | ST-03 | 1pc |

88S+ Options

| Item | Model | Remark |
|---------------|-------------|--|
| Fiber holder | FH-70-200 | 200um coating diameter |
| | FH-70-250 | 250um coating diameter |
| | FH-70-900 | 900um coating diameter |
| | FH-70-160 | 160um coating diameter |
| | FH-70-500 | 500um coating diameter |
| | FH-60-DC250 | 250um in drop wire cable |
| | FH-FC-20 | 900um in 2mm diameter cable |
| DC Adapter | DCA-03 | Connect AC adapter not through battery |
| | DCC-20 | Car cigar socket to BTR-15/DCA-03 |
| DC power cord | DCC-21 | Car battery to BTR-15/DCA-03 |
| | CLAMP-DC-12 | Transferring drop cable on work tray |
| J-Plate | JP-10 | Attaching to splicer, not to work tray |
| | JP-10-FC | JP-10 with fiber clamps |

*1: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

*2: Please follow IATA regulation when shipping the battery by air.



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Keith Electronics Pvt. Ltd.

Jitendra Sharma

Contact No. 9954709701

WhatsApp No. 9678443340



Handwritten initials 'HX'.

33S Specifications

| Item | | Specification | |
|------------------------------|-----------------------------|---|---|
| Fiber alignment method | | Active clad alignment | |
| Fiber count can be spliced | | Single fiber | |
| Applicable fiber | Fiber type | Single mode optical fiber Multi mode optical fiber | |
| | Cladding dia. | Approx. 125µm | |
| Applicable coating | Sheath clamp | Coating dia. : Max. 3000µm Cleave length : 5 to 16mm *1 | |
| | | Fiber splice performance | Splice loss *2 ITU-T G.652 : Avg. 0.03dB ITU-T G.651 : Avg. 0.01dB ITU-T G.653 : Avg. 0.05dB ITU-T G.655 : Avg. 0.05dB ITU-T G.657 : Avg. 0.03dB Splice time *3 SM FAST mode : Avg. 6 to 7sec. |
| Applicable Protection sleeve | Sleeve type | Heat shrinkable sleeve | |
| | Sleeve length | Max. 66mm | |
| | Sleeve dia. | Max. 6.0mm before shrinking | |
| Sleeve heat performance | Heat time *4 | 60mm mode : Avg. 15 to 22sec. 60mm slim mode : Avg. 15 to 17sec. | |
| Fiber tensile test force | | Approx. 2.0N | |
| Electrode life *5 | | Approx. 6,000 splices | |
| Physical description | Dimensions W | Approx. 131mm without projection | |
| | Dimensions D | Approx. 123mm without projection | |
| | Dimensions H | Approx. 121mm without projection | |
| | Weight | Approx. 1.4kg including battery | |
| Environmental condition | Temperature | Operate: -10 to 50 °C Storage: -40 to 80 °C | |
| | | Humidity | Operate: 0 to 95%RH non-condensing Storage: 0 to 95%RH non-condensing |
| | Altitude | Max. 5000m | |
| AC adaptor | Input | AC100 to 240V, 50/60Hz, Max. 1A | |
| Battery pack | Type | Rechargeable Lithium Ion | |
| | Output | Approx. DC14.4V, 3190mAh | |
| | Capacity *6 | 60mm mode: | Approx. 200 splice and heat cycles |
| | | 60mm slim mode : | Approx. 230 splice and heat cycles |
| | Temperature | Recharge: 0 to 40 °C Long Term Storage : -20 to 30 °C | |
| Battery life *7 | Approx. 500 recharge cycles | | |
| Display | LCD monitor | TFT 4.95 inches with touch screen | |
| Illumination | Magnification | Approx. 132 to 300x | |
| | V-grooves | LED lamp | |
| Interface | PC | USB2.0 Mini B type | |
| | External LED lamp | USB2.0 A type Approx. DC5V, 500mA | |
| Data storage | Splice mode | 100 splice modes | |
| | Heat mode | 30 heat modes | |
| | Splice result | 20,000 splices | |
| | Splice image | 100 images | |
| Screw hole for tripod | | 1/4-20UNC | |
| Other features | Reference guide | PDF file stored in splicer Open with/without Wind Protector Close with fiber setting Easy sleeve positioning clamp | |
| | Sheath clamp | Replaceable without tool | |
| | Electrode | | |
| | | | |

33S Standard package

| Item | Model | Qty |
|-------------------------------|--------------------------|--------|
| Clad Alignment Fusion Splicer | 33S | 1 pc |
| (1) Battery Pack * | BTR-17 | 1 pc |
| (2) AC Adapter | ADC-21 | 1 pc |
| (3) AC Power Cord | ACC-08, 09, 10, 11 or 12 | 1 pc |
| (4) USB Cable | USB-01 | 1 pc |
| (5) Electrodes, for spare | ELCT2-16B | 1 pair |
| (6) Carrying Case | CC-44 | 1 pc |
| (7) PC Setting Guide | SG-09-E | 1 pc |
| (8) Warning and Cautions | WAC-02-E | 1 pc |
| (9) Splice Test Report | | 1 pc |
| (10) Instructional Manual | M-CT16-E | 1 pc |
| (11) Quick Reference Guide | QRG-08-E, C or J | 1 pc |
| Single Fiber Stripper | SS05 | 1 pc |
| Optical Fiber Cleaver | CT16 | 1 pc |
| (1) Fiber Scrap Collector | FBD-06 | 1 pc |
| (2) Fiber Setting Plate | AD-16A | 1 pc |
| (3) Hexagonal Wrench | HEX-01 | 1 pc |

* Please follow IATA regulation when shipping the battery by air

33S Options

| Item | Model | Remarks |
|------------------------|-------------|--------------------------------------|
| Fiber Holder | FH-70-200 | 200µm coating diameter |
| | FH-70-250 | 250µm coating diameter |
| | FH-70-900 | 900µm coating diameter |
| | FH-FC-20 | 900µm in 2mm diameter cable |
| | FH-FC-30 | 900µm in 3mm diameter cable |
| Sheath Clamp | CLAMP-S35B | 900µm loose buffer cable |
| Fiber holder set plate | SP-04 | Fiber holder set base |
| Transfer Clamp | CLAMP-DC-12 | Transferring drop cable on work tray |
| Protection sleeve | FP-03 | 60mm, Max. 900µm coating diameter |
| | FP-03(L=40) | 40mm, Max. 900µm coating diameter |

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Keith Electronics Pvt. Ltd.

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Guwahati
Assam



3

Cordless Drilling machine-BOSCH Professional GSR 120

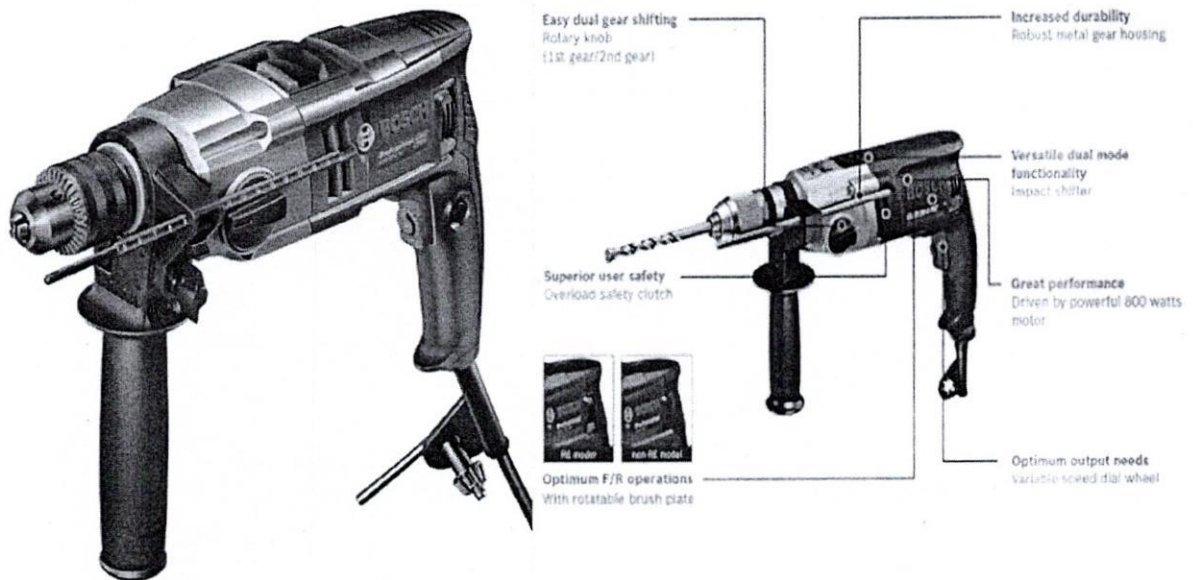


Bosch Professional GSR 120-LI
 Cordless Drill Driver, 12V, 10
 mm Chuck with 2 x GBA 12V
 2.0Ah Battery, 1 x GAL 1210
 CV Charger & Carrying Case &
 21...



X

4. Drilling Machine (BOSCH) for Heavy Duty



Features

- Ergonomic handle for easy handling and best work results.
- Selector switch for drilling / impact drilling.
- Impact-resistant keyed chuck.
- 2-speed impact drill with synchronised gears for wide range of applications.
- Electronic control for exact pilot drilling.
- Speed preselection with setting wheel.
- Forward / reverse rotation.
- Auxiliary handle with depth stop.

Specifications

| | |
|-------------------|---|
| Rated Power Input | 701 W |
| No-Load Speed | 1st : 0 – 1000 rpm 2nd: 0 – 3000 rpm |
| Power Output | 380 W |
| Net Weight | 2.2 kg |



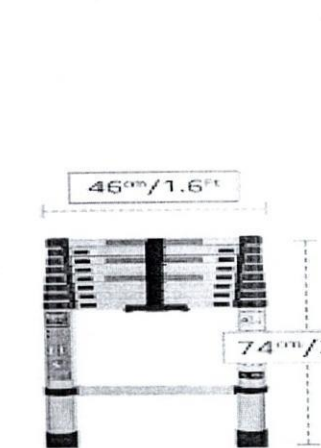
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|---------------------------------|--|
| Rated Speed | 1st : 0 – 600 rpm 2nd: 0 – 2200 rpm |
| Drill Spindle Connecting Thread | 1/2" – 20 UNF |
| Chuck Capacity | 1.5 – 13 mm |
| Impact Rate at No-Load Speed | 1st : 0 – 16000 bpm 2nd: 0 – 48000 bpm |
| Drilling Capacity | Brick : 20mm / 13mm Wood: 40mm / 25mm Steel : 13mm / 8mm |



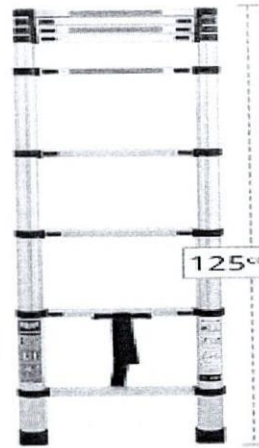
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Telescopic Ladder

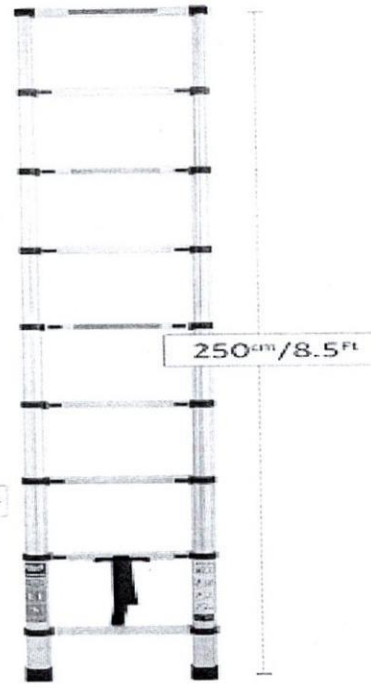
Product Dimensions



Folding Dimensions.



Extended Dimensions.



3X
Tashir
Tashir Intocomm
Tashir Intocomm

6. A-Shaped Aluminium double-sided Ladder (2.5 Meters)



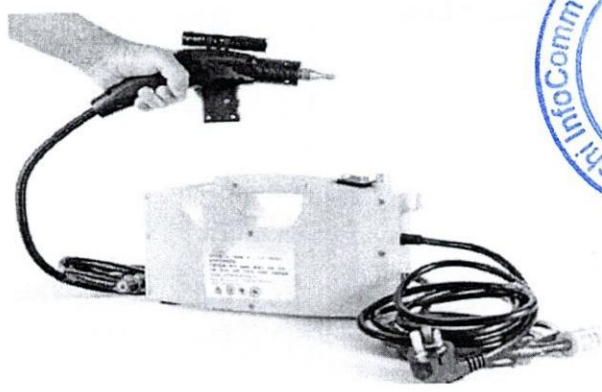
7. Rechargeable Lead Torch

7



8. Air Conditioner Cleaner Machine

8



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Welding Machine



Cheston 200A Portable Inverter Auto ARC/MMA Stick Compact Welding Machine | IGBT Technology & Digital Display | Hot Start & Anti-Stick Function |...



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Handwritten signature and the number 3.