

# Certificate of Acceptance

PA05/04078

**Manufacturer:**  
Passcomm Limited

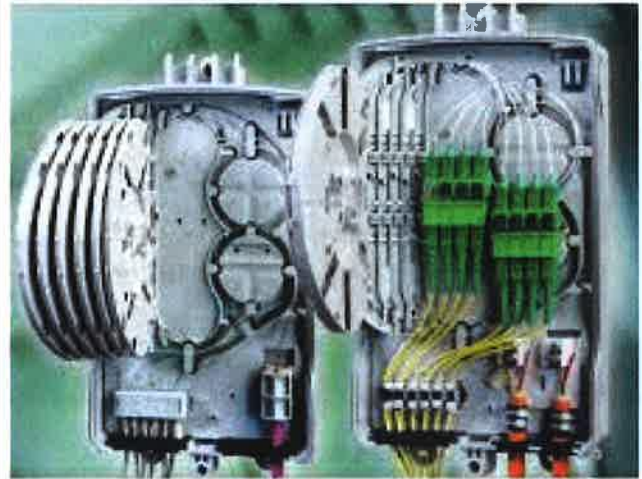
**Issue :** 5  
**Valid From :** 29-01-2018

## Internal Small Fibre Termination Enclosures with BUDI

### Product Description

A range of wall-mounted products for terminating and patching optical fibres.

### Product Image



### Scope of Acceptance

#### Full Acceptance

- For use as a wall-mounted enclosure to terminate and patch optical fibres
- For use with SOSA 2 splicing trays (PA05/01737)

**Issue 5** - Requirement to house the equipment in temperature controlled environments has been removed in light of qualitative and experiential testing that shows full performance in conditions without climate control.

Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager.

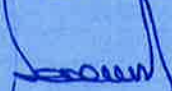
Reviewed by:



Usha Trivedi  
Product Acceptance Coordinator

Authorised by:

29.01.2018



Dany Mandoc  
Professional Head of Telecoms

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## Specific Conditions

The following Conditions are specific to the approved product/s contained within this Certificate. These conditions must be adhered to in addition to the Network Rail General Conditions contained within the "General Terms and Conditions" section.

Failure to adhere to these conditions may result in the withdrawal or suspension of Acceptance of some, or all of the items contained within the accepted configuration.

### Manufacturer

- 1) Please refer to General Terms and Conditions

### User

- 1) For use as a wall-mounted enclosure to terminate and patch optical fibres
- 2) For use with SOSA 2 splicing trays (PA05/01737)

## Product Configuration

### System or Complete Assembly

| Part No.                  | Description                                                   | Catalogue No. |
|---------------------------|---------------------------------------------------------------|---------------|
| <b>Termination Kits</b>   |                                                               |               |
| BUDI-2S-SP-36ES           | Small splice box up to 36 fibres. No lock                     | 087/004402    |
| BUDI-2S-T-04S2-ES         | Small termination box for 4 SC/APC pigtails. No Lock          | 087/004403    |
| BUDI-1S-SP-A              | Medium splice box up to 96 fibres. No lock                    | 087/004404    |
| BUDI-1S-T-A               | Medium termination box up to 16 fibre terminations. No lock   | 087/004405    |
| BUDI-S-SP-A               | Medium splice box up to 168 fibres. No lock                   | 087/004406    |
| BUDI-S-T-A                | Medium Splice/Patch box up to 24 fibre terminations. No lock  | 087/004407    |
| BUDI-M-SP-A               | Large splice box up to 216 fibres. No lock                    | 087/004408    |
| BUDI-M-TA-A               | Large Splice/Patch box up to 48 fibre terminations. No lock   | 087/004409    |
| <b>Seals</b>              |                                                               |               |
| BUDI-2S-SEAL-MAIN-01-(57) | Main cable seal                                               | 087/004410    |
| BUDI-2S-SEAL-4x7-(57)     | Cable seal for 4 x 7mm cables                                 | 087/004411    |
| BUDI-2S-SEAL-12x3-(57)    | Cable seal for 12 x 3mm cables                                | 087/004412    |
| BUDI-S-SEAL-2x20          | Wrap around cable seal 2x20mm cables (looped)                 | 087/004413    |
| BUDI-S-SEAL-4x10          | Wrap around cable seal 4x10mm cables                          | 087/004414    |
| BUDI-S-SEAL-4x15          | Wrap around cable seal 4x15mm cables                          | 087/004415    |
| BUDI-S-SEAL-24x5          | Push through cable seal 24x5mm cables                         | 087/004416    |
| BUDI-S-SEAL-24x7          | Push through cable seal 24x7mm cables                         | 087/004417    |
| BUDI-S-PTS-48x3           | Wraparound seal for 48 pigtails up to 3.5mm (indoor use only) | 087/004418    |
| BUDI-S-PPS-24 L2          | Seal with integrated 24 way SC/APC patch panel                | 087/004419    |
| BUDI-M-SEAL-3x20          | Wrap around cable seal 3x20mm cables                          | 087/004420    |
| BUDI-M-SEAL-6x15          | Wrap around cable seal 6x15mm cables                          | 087/004421    |
| BUDI-M-SEAL-6x10          | Wrap around cable seal 6x10mm cables                          | 087/004422    |

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| Splicing trays         |                                                        |            |
|------------------------|--------------------------------------------------------|------------|
| FIST-SOSA2-4-SE-S      | 4 Tray single element sub-assembly                     | 087/004361 |
| FIST-SOSA2-2-SE-S      | 2 Tray single element sub-assembly                     | 087/076293 |
| FIST-SOSA2-4-SC-S      | 4 Tray single circuit sub-assembly                     | 087/004365 |
| FIST-SOSA2-8-SC-S      | 8 Tray single circuit sub-assembly                     | 087/004360 |
| Glands                 |                                                        |            |
| FIST-GB-DRCHS-01       | Heat shrink gland for 1 x cable 8-21mm                 | 087/004423 |
| FIST-GB-GLD29-01       | Cable gland PG29 (for cable diameter 15-26mm)          | 087/004806 |
| FIST-GB-GLD21-01       | Cable gland PG21 (for cable diameter 9-18mm)           | 087/004424 |
| FIST-GB-GLD17-01       | Cable gland PG16 (for cable diameter 6-14mm)           | 087/004805 |
| FIST-GB-PTS24-01       | Seal gland for 24 pigtails/patch cords (0-3.0mm) PG29  | 087/004803 |
| FIST-GB-PTS6X4-PG21-01 | Seal gland for 0-6 pigtails/patch cords (0-4.0mm) PG21 | 087/004425 |
| FIST-GB-GD16-PT4       | Seal gland for 0-4 pigtails/patch cords (0-2.4mm) PG16 | 087/004807 |
| FIST-GB-GLD29-4X10     | Seal gland for 4 cables (8-10mm) PG29                  | 087/004426 |
| Miscellaneous parts    |                                                        |            |
| SMOUV-1120-02          | Heat shrink splice protection sleeve, 45mm             | 087/004366 |
| BUDI-2S-CTB-01         | Cable fixation bracket                                 | 087/004427 |
| BUDI-1S-LOOPBRCKT-01   | Loop bracket for uncut tubes                           | 087/004428 |
| FIST-SB/MB-STRBR-01    | Strain relief device (ENSTO) with double-D washer      | 087/004367 |
| FIST-GB-GRND-02        | Grounding feed-through kit (excluding wire)            | 087/004429 |
| BUDI-CBL-FIX1-GLD      | Bracket for use with GLD glands                        | 087/004430 |
| CF-GB/AD-SA            | OC-ADK-S2-S2-NNCS SC/APC adapter and retainer          | 087/004368 |
| C01SASA99NR03          | 3-metre double-ended SC/APC pigtail S/M G652 0.9mm     | 087/004431 |
| ADSASZ01               | SC/APC adaptor simplex – zirconia sleeve               | 087/004432 |
| FIST-GB-GLD29-4X10     | Seal gland for 4 cables (8-10mm) PG29                  | 087/004426 |

## Assessed Documentation

| Reference         | Title                                                             | Doc. Rev. | Date and Applies to Cert. issue No. |   |
|-------------------|-------------------------------------------------------------------|-----------|-------------------------------------|---|
| TC 626/IP/3 05/03 | FIST-SB2-8 Installation instruction                               | --        | --                                  | 1 |
| OGBSB2            | Ordering Guide of the Small Fibre Termination Box (FIST-SB2-8).   | --        | Feb 2003                            | 1 |
| --                | E-mail from Raul Marquez                                          | --        | 28/04/2009                          | 1 |
| --                | FIST-GB2 generic box product information                          | --        | Undated                             | 2 |
| --                | FIST-CTB2-4 Compact termination box product information           | --        | Undated                             | 2 |
| RUD 5297          | Technical Specification for the Customer Termination Box FIST-GB2 | --        | Sept 2000                           | 2 |
| --                | Ordering Guide of the Generic Fibre Termination Box (FIST-GB2).   | --        | Feb 2003                            | 2 |
| --                | Ordering Guide of the Medium Fibre Termination Box (FIST-MB2).    | --        | Feb 2004                            | 2 |
| --                | E-mail from John Payne to David Dixon (TBP)                       | --        | 05/11/2009                          | 2 |
| --                | Recommendation Form by NR Engineer                                | --        | 28/07/2011                          | 3 |

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|------------------|----------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------|---|
| RUD 5411         | Specification for BuDi (Building Distribution) wall box with SOSA (Splice Only Sub-Assembly) fibre management system | D1        | Nov 2011                            | 4 |
| CTR 914          | Transient Optical Loss Testing Report on the BuDi-M and FIST-GCO2                                                    | 1         | 06/08/2013                          | 4 |
| TC 1080/DS/2     | ds budi 1S: Datasheet for building distribution enclosure - splice patch with FIST system                            | --        | Sep 2012                            | 4 |
| TC 1148/DS/3     | ds budi 2S FIST: Datasheet for building distribution enclosure.                                                      | --        | Apr 2013                            | 4 |
| TC 1136/DS/1     | ds budi M T FIST: Datasheet for building distribution enclosure -                                                    | --        | Sep 2012                            | 4 |
| TC 1072/DS/3     | ds budi S and budi M Datasheet for building distribution enclosure -                                                 | --        | Sep 2012                            | 4 |
| TC 1127/DS/1     | ds budi S T FIST: Datasheet for building distribution enclosure -                                                    | --        | Sep 2012                            | 4 |
| TC 988/IP/1      | ii budi 1S SP: Installation instructions for building distribution enclosure splice & patch                          | --        | Sep 2011                            | 4 |
| TC1088/IP/1      | ii budi 2S 2P: Installation instructions for building distribution enclosure                                         | --        | Dec 2012                            | 4 |
| TC 1212/IP/2     | ii budi 2S Patch: Installation instructions for building distribution enclosure                                      | --        | May 2013                            | 4 |
| TC 1088/IP/2     | ii budi 2S SP: Installation instructions for building distribution enclosure                                         | --        | May 2013                            | 4 |
| TC984/IP/2       | ii budi M SP: Installation instructions for building distribution enclosure                                          | --        | Mar 2013                            | 4 |
| TC 1087/IP/2     | ii budi M TA TP: Installation instructions for building distribution enclosure                                       | --        | Oct 2012                            | 4 |
| TC 957/IP/2      | ii budi S SP: Installation instructions for building distribution enclosure                                          | --        | Mar 2013                            | 4 |
| TC 1231/IP       | ii budi S T: Installation instructions for building distribution enclosure                                           | --        | Mar 2013                            | 4 |
| OG/BUDI-1S       | og budi 1S: Ordering guide for building distribution enclosure                                                       | --        | 03/10/2012                          | 4 |
| OG/BUDI          | og budi S and budi M: Ordering guide for building distribution enclosure                                             | --        | 02/10/2012                          | 4 |
| Email            | Product Configuration                                                                                                | --        | 05/09/2013                          | 4 |
| SAC-04K-001-E-02 | Senko specification for SC (subscriber connection) optical connectors.                                               | 1         | 01/03/2015                          | 1 |

## Manuals and Training Materials

| Reference    | Title                                                                                       | Doc. Rev. | Date and Applies to Cert. issue No. |   |
|--------------|---------------------------------------------------------------------------------------------|-----------|-------------------------------------|---|
| TC 988/IP/1  | ii budi 1S SP: Installation instructions for building distribution enclosure splice & patch | --        | Sep 2011                            | 3 |
| TC1088/IP/1  | ii budi 2S 2P: Installation instructions for building distribution enclosure                | --        | Dec 2012                            | 3 |
| TC 1212/IP/2 | ii budi 2S Patch: Installation instructions for building distribution enclosure             | --        | May 2013                            | 3 |

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| Reference    | Title                                                                          | Doc. Rev. | Date and Applies to Cert. issue No. |   |
|--------------|--------------------------------------------------------------------------------|-----------|-------------------------------------|---|
| TC 1088/IP/2 | ii budi 2S SP: Installation instructions for building distribution enclosure   | --        | May 2013                            | 3 |
| TC984/IP/2   | ii budi M SP: Installation instructions for building distribution enclosure    | --        | Mar 2013                            | 3 |
| TC 1087/IP/2 | ii budi M TA TP: Installation instructions for building distribution enclosure | --        | Oct 2012                            | 3 |
| TC 957/IP/2  | ii budi S SP: Installation instructions for building distribution enclosure    | --        | Mar 2013                            | 3 |
| TC 1231/IP   | ii budi S T: Installation instructions for building distribution enclosure     | --        | Mar 2013                            | 3 |

## Certificate History

| Issue | Date       | Issue History                                                                                                                                                                                                  |
|-------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 11/05/2009 | First accepted for use                                                                                                                                                                                         |
| 2     | 23/11/2009 | Revised scope of acceptance, user clause, and product configurations                                                                                                                                           |
| 3     | 16/09/2011 | Manufacture details changed from Tyco Electronics (UK) Ltd to PAsscomm Ltd                                                                                                                                     |
| 4     | 12/09/2013 | Superseded FIST SB, MB, and GB systems withdrawn and replaced with FIST BUDI system.                                                                                                                           |
| 5     | 29/01/2018 | Requirement to house the equipment in temperature controlled environments has been removed in light of qualitative and experiential testing that shows full performance in conditions without climate control. |

## Contact Details

### Manufacturer

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### Applicant

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### Lead Reviewer

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## General Terms & Conditions

### 1) General

- 1) This certificate can only be amended by Network Rail Technology Introduction Group. Any alterations made by a different person will invalidate the entire certificate.
- 2) Failure to abide by the requirements in this Certificate of Acceptance may invalidate the certificate, thereby restricting the right to operate the product and / or limiting the future supply and deployment of the product on the infrastructure.
- 3) Upon the review date this certificate and the product it relates to is invalid and not accepted for use. Manufacturers are to make an application for a review prior to the review date.

### 2) Manufacturer

The Manufacturer shall:

- 1) Ensure that all products supplied comply with the standards defined in the Acceptance Requirements or otherwise documented as part of the assessment, including meeting the reliability requirements included in the Acceptance Requirements and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Technology Introduction Group:
  - a. Within 48 hours, of any deficiencies affecting the quality, functionality or safety integrity of the product (including corrective action undertaken or proposed).
  - b. Of any intended change to the accepted product; changes include:
    - i. a change to the product configuration (to the actual product or its application);
    - ii. a variation to or addition of manufacturing locations or processes;
    - iii. a change in the name or ownership of the manufacturing company;
    - iv. any changes to the ability or intention to support with technical services, spares or repairs.
- 3) The Manufacturer shall provide Network Rail Technology Introduction Group at least 12 (twelve) months notice of its intention to discontinue supply or to provide such notice as is reasonable if such discontinuance is outside its control and will offer the opportunity of a Last Time Buy to Network Rail together with date for last order placement and supply of the parts affected. The introduction of proposed alternative products shall be communicated to the Network Rail Technology Introduction Group.
- 4) Provide further copies of operating and maintenance manuals to purchasers / users of the product as necessary (including certificates of conformance, calibration etc).
- 5) Provide further copies of training manuals and an appropriate level of training to purchasers or users of the product as necessary.
- 6) Where applicable, specialist technical support, repairs and servicing of the product shall be carried out by the Original Equipment Manufacturer (OEM) or authorised agent only.
- 7) Network Rail may request information from the manufacturer to prove product compliance with clauses 1 and 2 above and reserve the right to suspend and/or withdraw any application where information is not forthcoming within a reasonable timeframe.
- 8) In accordance with Network Rail's Quality Assurance Policy Statement 2011, where the specification and/or Product Acceptance Certificates specify quality assurance classifications (QA1 to QA5) for the products, the manufacturer shall comply with the specified level of quality assurance for each product and allow Network Rail access to carry out its quality assurance checks.
- 9) The manufacturer shall give Network Rail's representatives access at all reasonable times to its premises and allow them to inspect its quality systems and production methods and, if requested, to inspect, examine and test the products both during and after their manufacture and the materials being used in their manufacture.

### 3) Conditions of Use

Specifiers, installers, operators, maintainers, etc. using the product shall:

- 1) Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
- 2) Check that the application of use complies with the relevant certificate's scope of acceptance.
- 3) Report any defect if it is a design or manufacturing fault likely to affect performance and/or the safe operation of the railway in writing to Network Rail Technology Introduction Group.
- 4) Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
- 5) Operate, maintain and service the product in accordance with Network Rail standards and Operation and Maintenance manuals as appropriate.
- 6) Be appropriately trained and authorised for the installation, maintenance and use of the product.
- 7) Only send products for repair or reconditioning to the Original Equipment Manufacturer (OEM) or authorised agent.
- 8) Users are to be aware that Product Acceptance is not a substitute for design approval.

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#### 4) Compliance

Railways and Other Guided Systems (ROGS) Regulations

- 1) Where the product is to be used in areas where Network Rail is not the Infrastructure Manager (e.g. leased stations), the sponsor shall additionally obtain formal consent from the Infrastructure Manager for the locality where the equipment is to be installed. This may include a requirement for additional safety verification. The decision of that Infrastructure Manager is binding, and cannot be overridden by Network Rail except by the escalation processes established in the ROGS regulations
- 2) As required in Railway Group Standard GE/RT8270, at each use of this product the project or group responsible for installation and commissioning shall be required to demonstrate compatibility with:

- a. All rail vehicle types that have access rights over the area affected by the change
- b. Infrastructure managed by others
- c. Neighbours.

Railway Interoperability Regulations

- 3) For interoperable constituents of systems the project or group responsible for installation and commissioning shall be required to demonstrate compliance with the relevant Technical Specifications for Interoperability (TSI) where appropriate.
- 4) An authorisation from the national safety authority (i.e. the Railway Safety Directorate of the Office of Rail Regulation) is required before the equipment is to be used in revenue earning service.

#### 5) Supply Chain Arrangements

- 1) Certificates of acceptance do not imply any particular quantity of supply nor any exclusivity of supply.
- 2) Products may be purchased by Network Rail or its agents, suppliers or contractors.
- 3) Manufacturers should note that it is not necessary to enter into any exclusive supply arrangements with resellers or other suppliers.