

Laboratory Software

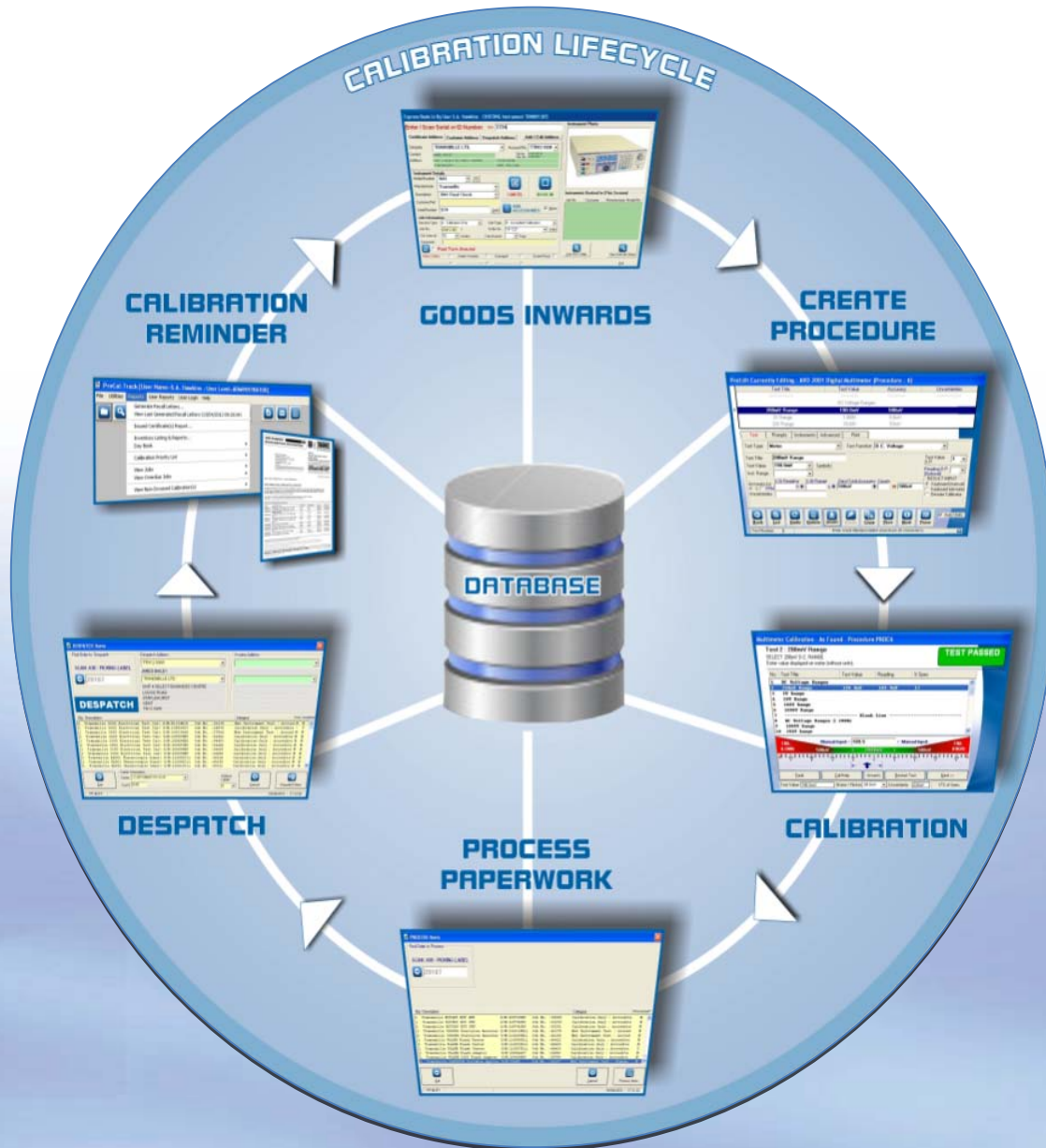


ProCal
Calibration Software



ProCal Track
Management Software

Instrument Management Lifecycle



ProCal Calibration Software

MULTI DISCIPLINE CALIBRATION SOFTWARE

- ▷ **UNIVERSAL** CALIBRATION SOFTWARE
- ▷ **FAST** PROCEDURE CREATION - **PROCEDURE WIZARDS**
- ▷ **CREATE & PRINT** CERTIFICATES ON PLAIN PAPER
- ▷ **M3003 / GUM** UNCERTAINTIES
- ▷ **SUPPORTS** **CRYSTAL** REPORTS
- ▷ **CALIBRATION** PRICING SUPPORT



Multimeter Calibration - As Found - Procedure PROC6

Test 2: 200mV Range
SELECT 200mV D.C. RANGE
Enter value displayed on meter (without units)

TEST PASSED

| No. | Test Title | Test Value | Reading | % Spec. |
|-----|--------------------------|------------|------------|---------|
| 1 | DC Voltage Range | | | |
| 2 | 200mV Range | 130.0mV | 189.7mV | 17 |
| 3 | 2V Range | | | |
| 4 | 20V Range | | | |
| 5 | 200V Range | | | |
| 6 | 1000V Range | | | |
| 7 | | | Blank Line | |
| 8 | AC Voltage Range @ 200Hz | | | |
| 9 | 1000V Range | | | |
| 10 | 200V Range | | | |

Manual Input: 189.9

FAIL (LOW) 500uV | 190.0uV | 500uV

Buttons: Exit, Cal Help, Uncerts, Restart Test

Test Value: 130.0mV | Noise / Flicker: 50.0uV | Uncertainty: 220uV | 17%

PROCEDURE WIZARDS

GRAPHICAL CALIBRATION



PROCAL

ProCal Calibration Software

Full suite of software, from booking in to despatch



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- CALIBRATION PRICING SUPPORT

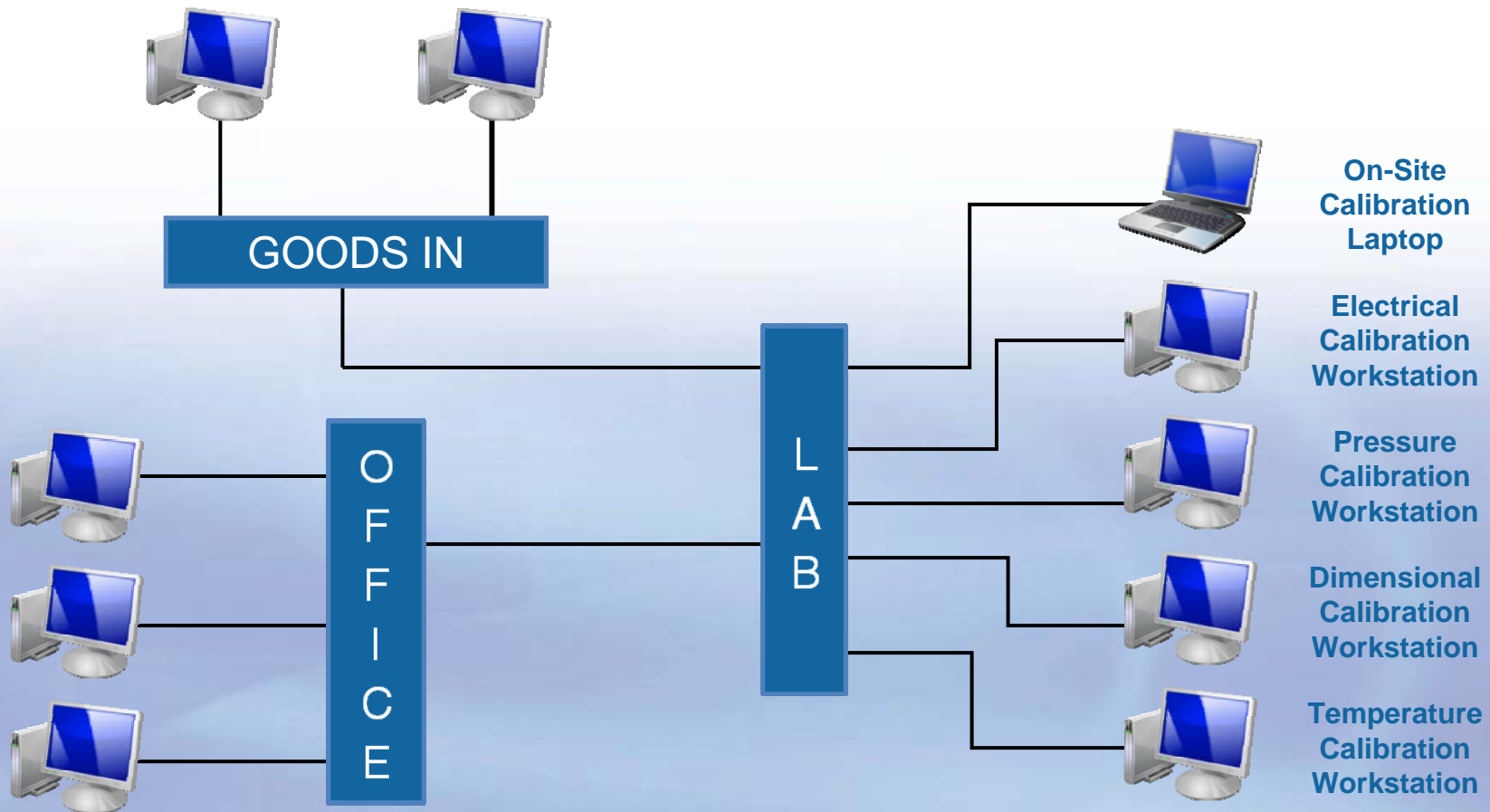


- JOB CONTROL FROM GOODS IN TO DESPATCH
- VIRTUAL JOB SHEET :: DYNAMIC JOB TRACKING
- GOODS INWARDS & ACCESSORIES MANAGEMENT
- DESIGNED FOR OFFICE & LAB
- SUPPORTS CRYSTAL REPORTS
- BUILT-IN REPORTS & LABELS

ProCal Calibration Software

NETWORKABLE SYSTEM –

CAN BE USED THROUGHOUT THE LABORATORY & OFFICE



ProCal Multi Discipline Software

ProCal can be used for all of your calibration work, including;

- Electrical
- Pressure
- Dimensional
- Temperature
- Torque

And many more!



Graphical Display of Measurements

TECHNICAL DATA FOLDER
 A DATA FOLDER DEDICATED TO THE UUT. USEFUL FOR STORING MANUFACTURER DATA INCLUDING MANUALS AND SPECIFICATIONS.

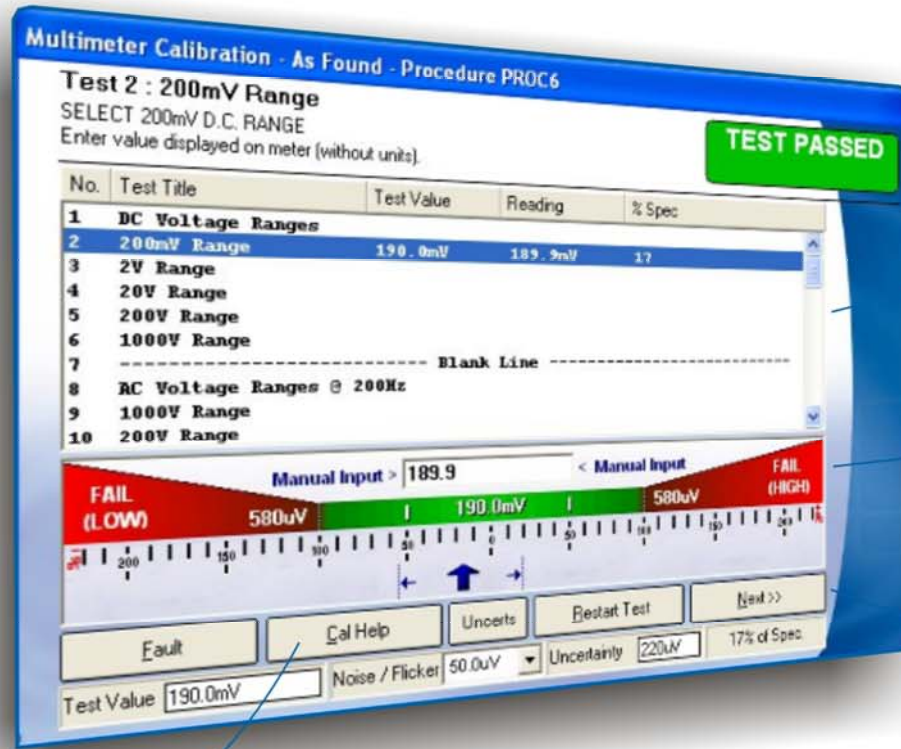
LAB PROCEDURE
 LINK DIRECTLY TO THE PROCEDURE DEFINED BY LABORATORY OPERATING PROCEDURES, AIDING SUPPORT OF QUALITY AND OPERATING POLICIES

CALIBRATION PROMPT
 A DEDICATED PROMPT SCREEN WITH DETAILS ON ADJUSTMENT OR SET UP. CAN INCLUDE A PHOTO, DIAGRAM OR VIDEO WITH ADDITIONAL TEXT.

TECHNICAL HELP FILE
 A NOTEPAD BASED TEXT FILE PROVIDING USEFUL NOTES AND TECHNICAL DATA ON THE UNIT UNDER TEST.

CAL HELP FUNCTION AVAILABLE DURING EACH TEST

- CALIBRATION PROMPT SCREEN
- TECHNICAL HELP FILE
- TECHNICAL DATA FOLDER
- LABORATORY PROCEDURE



TRAFFIC LIGHT SYSTEM FOR TEST STATUS.

- TEST PASSED** TEST WITHIN ACCURACY LIMITS
- TEST MARGINAL** TEST BORDERLINE ACCURACY LIMITS*
- TEST FAILED** TEST OUTSIDE ACCURACY LIMITS

* ALSO INDICATES TEST PROBABLE PASS / FAIL FOR M3003 / GUM UNCERTAINTY

TEST LIST WITH KEY DATA - CLICK ON A LINE TO RETEST

- TEST TITLE
- TEST VALUE
- READING
- % OF SPECIFICATION

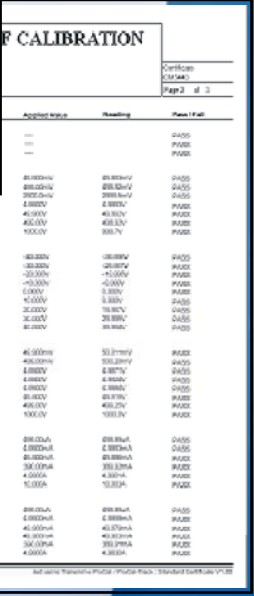
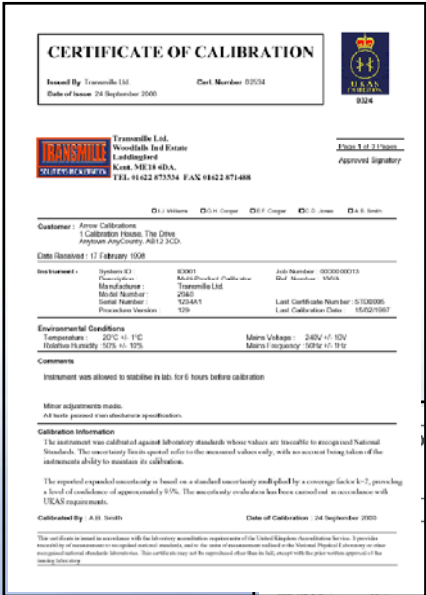
GRAPHICAL DISPLAY FOR ACCURACY (+/-) AND UNCERTAINTIES

STEP BY STEP SEQUENCE GUIDES USER THROUGH TESTS WITH GRAPHICAL PROMPTS

- 'NEXT>>' TO PROCEED
- RESTART BUTTONS
- % OF SPECIFICATION
- FAULT BUTTON TO MARK FAULTY TEST

Digitally Generated Certificates & Reports

- Minimises errors due to incorrect typing / writing
- Eliminates time used typing in results
- Professional appearance
- Ensures full traceability, all historic certificates stored in a database – essential for when your customer loses their certificate and requires a re-issue



Automated Uncertainty Calculations

M3003/GUM compliant uncertainty calculations simplify calculation of uncertainties.

ProCal enables the user to view the calculation, essential for audit purposes

The screenshot displays the 'M3003 Uncertainties Calculation Using 'DCV Source' Uncertainty Template' window. The main window contains a table with the following data:

| Source of Uncertainty | Limit Value | Probability Distribution | Div. | C _i | ±U _i |
|-------------------------------|-------------|--------------------------|------|----------------|-----------------|
| Imported Uncertainty | 16.5µV | Normal | 2.0 | 1.0 | 8.3µV |
| Stability of Reference | 64.0µV | Rectangular | √3 | 1.0 | 37.0µV |
| Resolution | 100.0µV | Rectangular | √3 | 1.0 | 57.7µV |
| Noise / Flicker | 100.0µV | Rectangular | √3 | 1.0 | 57.7µV |
| Lead / Connection Errors | 5.0µV | Rectangular | √3 | 1.0 | 2.9µV |
| Combined Standard Uncertainty | | Normal | | | 90.0µV |
| Expanded Uncertainty | | Normal (k=2) | | | 180µV |

The 'DCV Source' section at the top right of the table area specifies: 3010A Precision Multi-Product Calibrator : Line 3 [DCV : 2.02V to 20.2V], Calibration = 0.00033%, and Stability = 0.0008% + 24µV.

An 'M3003 Uncertainties Calculation Help' dialog box is overlaid on the table, displaying the following information:

- Stability % Reading = 40.0µV
- Stability Zero = 24.0µV
- Combined using NORMAL ADDITION

The dialog box has an 'OK' button at the bottom right.

Simple management of Uncertainty Budgets

ProCal makes developing and amending uncertainty budgets simple, with each contribution clearly laid out.

This saves time when external auditors verify budgets, simply view budgets as and when required. To assist in making this even simpler, ProCal can automatically link to your Procedure Manual as well as uncertainty evaluation documentation

Uncertainty Templates

| Source of | Limit Value | Probability Distribution | Divisor | C _i |
|--------------------------|-------------------------|--------------------------|------------|----------------|
| Imported Uncertainty | >Calculated During Calc | Normal | 2.0 | 1.0 |
| Stability of Reference | >Calculated During Calc | Rectangular | $\sqrt{3}$ | 1.0 |
| Resolution | >Calculated During Calc | Rectangular | $\sqrt{3}$ | 1.0 |
| Noise / Flicker | >Calculated During Calc | Rectangular | $\sqrt{3}$ | 1.0 |
| Lead / Connection Errors | 5uV | Rectangular | $\sqrt{3}$ | 1.0 |
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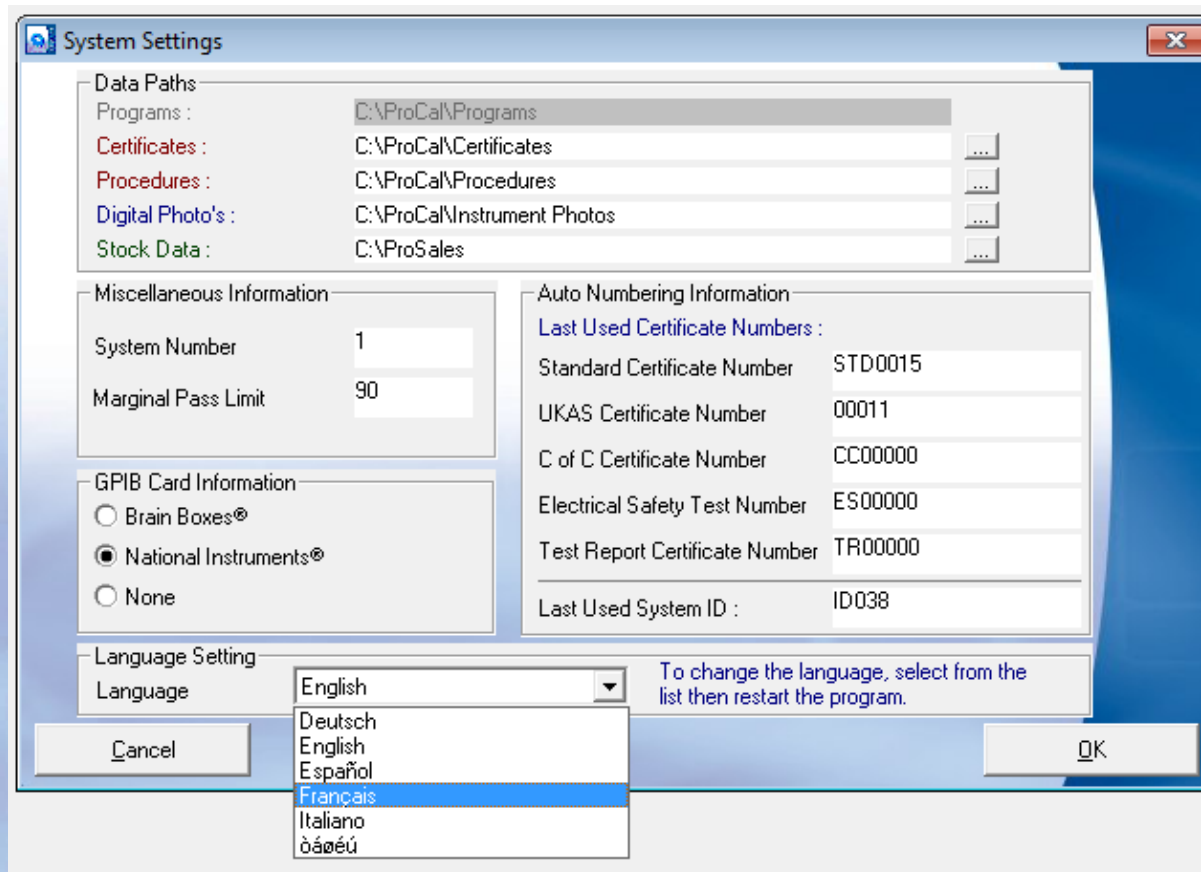
Uncertainty Templates

- ACI Source
- ACV Measure
- ACV Source
- Continuity Current
- Continuity Resistance
- DCI Measure
- DCI Source
- DCV Measure
- DCV Source**
- Earth Bond Current
- Earth Bond Resistance
- Flash Current
- Flash Voltage
- FREQ Measure
- FREQ Source
- Insulation Resistance
- Insulation Test Voltage
- Leakage Current
- Loop Resistance
- OHMS2 Measure
- OHMS2 Source
- OHMS4 Measure
- OHMS4 Source
- RCD Current
- RCD Time

Add Template View Uncertainty Evaluation View Procedure Manual Exit

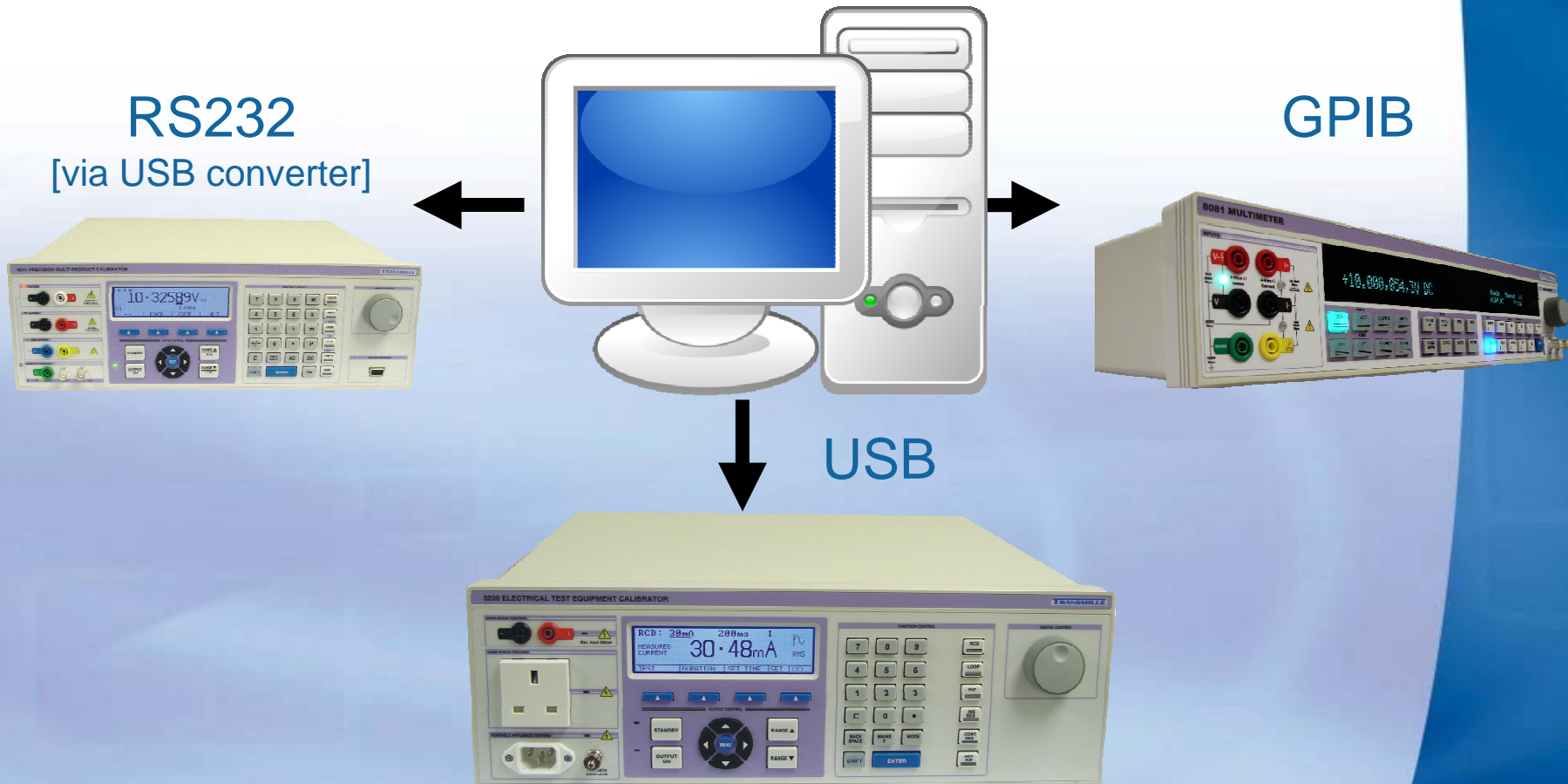
Local Language Support

Transmilles ProCal and ProCal-Track software can be fully translated into your local language. An ever increasing number of languages are included with ProCal, and adding additional languages can be performed by the user with ease



Multi Interface Support

Control a wide range of instruments using RS232/GPIB/USB Interface



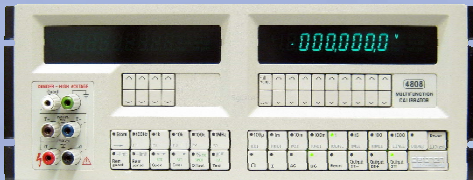
ProCal Supports Your Existing Equipment



Transmille understand that you may have existing equipment that is still in serviceable condition.



ProCal supports full remote control of popular equipment such as the Fluke 55xx series, Wavetek 9100, Agilent 3458A and many more



Write Procedures in **10 Minutes** or Less

ProEdit provides a wizard for many types of instruments, create new procedures with ease



These wizards are designed to automate as much as possible the writing of a procedure.

The wizard will allow 95% of the hard work to be done automatically, with only minor changes required to ranges / accuracies where necessary.

ProCal-Track Laboratory Management

Integrates calibration & laboratory management software solution

LABORATORY MANAGEMENT SOFTWARE

- ▷ JOB CONTROL FROM **GOODS IN** TO **DESPATCH**
- ▷ **VIRTUAL JOB SHEET** :: **DYNAMIC JOB TRACKING**
- ▷ **GOODS INWARDS & ACCESSORIES** MANAGEMENT
- ▷ **DESIGNED FOR OFFICE & LAB**
- ▷ SUPPORTS **CRYSTAL REPORTS**
- ▷ **BUILT-IN REPORTS & LABELS**



LABEL
PRINTING



BARCODE
SCANNING



Virtual Job Sheet [System ID : TPT8658C7]

Job No.: 23562 Certificate Add.: TRANSMILLE LTD., UNIT 4 SELECT BUSINESS
Instrument: Transmille 3010PT Customer Add.:

Job Info | Inst Details | Cert Address | Returned By | Despatch Address | Accessories | Service Details | History

Description: Multi-Product Calibrator
Manufacturer: Transmille
Model Number: 3010PT
Serial Number: 109658C7
Cust. Ref.:
Procedure No.: 2633
PAT Test Code:
Site: Cal. Source:
Department: Date Acquired:
Location: Date Scrapped:
Instrument Cost:

ON-SCREEN JOB SHEET

A screenshot of the software's 'On-Screen Job Sheet' interface, showing various input fields and buttons for job management.

GOODS INWARDS

A screenshot of the software's 'Processing & Despatch' interface, displaying a table of job data and control buttons.

PROCESSING & DESPATCH

PROCAL-TRACK

ProCal-Track Laboratory Management

Goods Inwards with barcode scanning, job sheet / job label printing and accessory tracking.



ProCal-Track Laboratory Management

When integrated with ProSales, ProCal-Track can automatically price calibration jobs, as well as generate invoices




Select a Product / Service

| | Stock Code | Description | Category | Cost (Accred) | Cost (Std) |
|---|------------|--------------------------------------|--------------------------------------|---------------|------------|
| ▶ | AmpCal001 | Power Amplifier | Calibration : Amplifiers/Attenuators | £98.00 | £78.00 |
| | AmpCal002 | Transconductance Amplifier | Calibration : Amplifiers/Attenuators | £194.00 | £152.00 |
| | AmpCal003 | Current Probe Amplifier (with probe) | Calibration : Amplifiers/Attenuators | £0.00 | £59.00 |
| | AmpCal004 | Switched Attenuator (> 5 Switches) | Calibration : Amplifiers/Attenuators | £115.00 | £90.00 |

TYPE : CALIBRATION

CATEGORY : Calibration : Amplifiers/Attenuators

Certificate Type
 Accredited
 Standard

ProCal-Track Laboratory Management

Goods Inwards with barcode scanning, job sheet / job label printing and accessory tracking.

Express Book-In By User - NEW Instrument

Enter / Scan Serial or ID Number >> 12345678

Certificate Address | **Customer Address** | **Despatch Address** | **Add / Edit Address**

Company: Account No.:

Contact: Tel No.:

Address: Fax No.:

Instrument Details

Model Number: 175

Manufacturer: Keithley

Description: Digital Multimeter (5.5 digit)

Customer Ref: ID123

Serial Number: 12345678 None

Job Information

Service Type: Cert Type:

Job No.: Order No.:


Cal. Interval: A : Calibration Only
B : Repair Only
C : Repair & Calibration
D : Modification
E : Investigation
F : Calibration (No Adj.)
G : New Instrument Test

Turn-Around: Days

Mains Safety Order warranty Damaged Quote Req'd

Recall Last Customer Recall Last Inst Details Recall Last Job info

Instrument Photo



Instruments Booked In (This Session)

| Job No. | Customer | Manufacturer | Model No. |
|---------|----------|--------------|-----------|
| | | | |

Automated Instrument Priority List

Simplify job management in your laboratory, ProCal displays the next calibration job in the queue, simplifying laboratory workload management

| Date of Receipt [Return] | Customer Name | Status | Model Number | Serial Number |
|--------------------------|-----------------------------|--------|--------------|---------------|
| 05/08/2004 [OD3454] | Echo Calibration Services > | J | TDS220 | B062137 |
| 13/12/2004 [OD3322] | Beta Calibrations | E | Example | SN0005 |
| 13/12/2004 [OD3322] | Jones Calibration Service > | E | SMARTPAT3K | SN0003 |
| 13/12/2004 [OD3319] | Arrow Calibrations | E | Example | SN0004 |
| 23/05/2012 [OD607] | Arrow Calibrations | I | 3050A | 3050 |
| 20/01/2014 [1] | Challenger Laboratories > | E | 77 | 123356345 |
| 20/01/2014 [3] | Jones Calibration Service > | E | Example | SN0001 |
| 21/01/2014 [3] | Arrow Calibrations | J | ET-2801 | 1234567 |

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i Tip: Double click on a list item to view on screen job sheet

Close Print List Refresh List

ProCal-Track Laboratory Management

On screen job sheet for complete overview of job progress and detailed instrument information.

Virtual Job Sheet [System ID : T101026F8]


Job No. : 35117-1 Certificate Add. : TRANSMILLE LTD., UNIT 4 SELECT BUSINESS
Instrument : Transmille 3010 Customer Add. : -----

Job Info | Inst Details | Cert Address | Returned By | Despatch Address | Accessories | Service Details | History

Description : Multi Product Calibrator ...
Manufacturer : Transmille ...
Model Number : 3010
Serial Number : G1026F8 Auto
Cust. Ref. : LAB01

Procedure No. : 4048
PAT Test Code : ...

Site : STAPLEHURST ...
Department : CALIBRATION ...
Location : UKAS LABORATORY ...



Cal. Source : Transmille ...
Date Acquired : 10/10/08
Date Scrapped :
Instrument Cost :

Close Print Menu Advanced Edit

Labels

- Quick and easy, saves time and effort
- Avoids un-readable hand written labels
- Easily customisable to add your own unique logo
- Prints different label types quickly and efficiently



Calibration label



Job Number label



Accessory ID label



ID label



www.youtube.com/Transmille



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Transmille : Solutions In Calibration

**Providing Innovative
Solutions For The
Metrology Industry**

