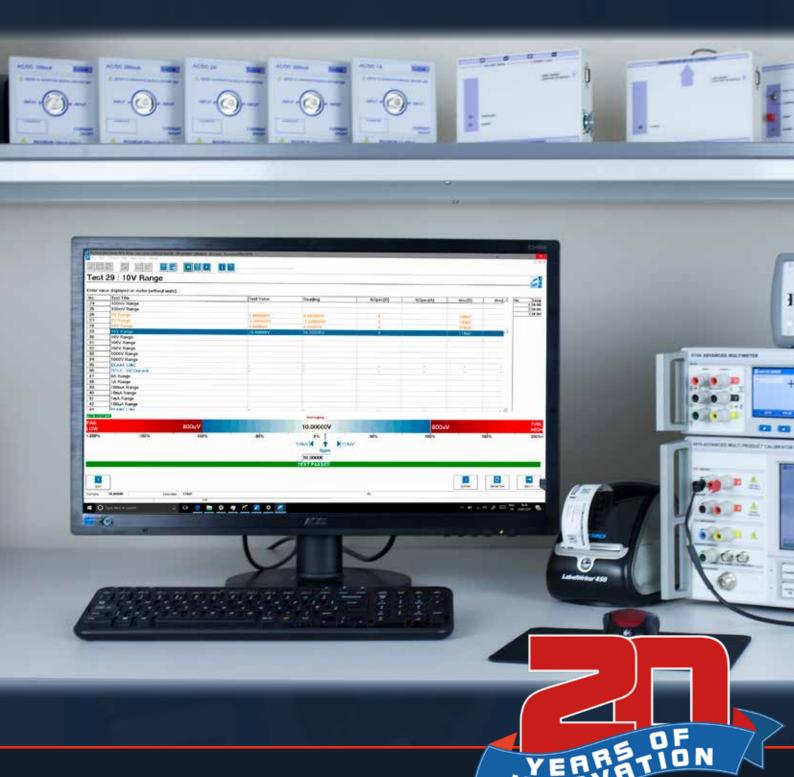


PROCAL

CALIBRATION & LABORATORY MANAGEMENT SOFTWARE SUITE



ABOUT US

We truly believe in offering Solutions in Calibration, offering bespoke solutions for calibration laboratories and manufacturers across the globe. Our mission statement is not just a phrase, it is our design and support philosophy, offering support and advice that cannot be found elsewhere with a friendly atmosphere.

Transmille was founded in 1997 as a commercial calibration service, and soon after began to develop and manufacture a range of electrical calibration products and software to answer a growing requirement for solutions to common problems. Following this small beginning, Transmille has worked year on year to provide unique equipment and software to benefit calibration laboratories and manufacturers across the globe.

Ever since releasing the very first products Transmille have continued to innovate and develop new products for the metrology community, from world first products such as the 2100 Electrical Test Equipment calibrator, through to the worlds lowest cost multi product calibrator the 1000 series.

Transmille now produce over 600+ calibration instruments per year, shipping instruments to customers ranging from National Standards Laboratories and manufacturers through to small calibration test houses around the world.

An unrivalled commitment to quality and innovation drives Transmille forwards, with a dedicated design and support team in house with a combined experience of over 60 years in manufacture and design of electrical calibration products and software.

With local distributors across the globe, we can offer one to one personalised support, no matter how large or small the customer.



TRANSMILLE CALIBRATION 158 Brentwood Drive, Unit #4 Colchester, VT 05446

Phone: 1 (802) 846 7582 sales@transmillecalibration.com www.transmillecalibration.com

JISTIDUTOL	Details.		



PROCAL SOFTWARE SUITE



Transmille's ProCal Software suite is a flexible solution that scales from single users to multi site calibration laboratories, all while remaining easy to use. Powered by an Enterprise grade Microsoft SQL database, ProCal Version 6 offers lightning fast access to data.

The ProCal Calibration suite provides all of the tools you need to perform automated calibrations and organise work-flow throughout your laboratory from quotations through to recalibration reminders.

The ProCal Calibration suite was designed with compliance to ISO 9000 and ISO 17025 in mind, with integrated dynamic uncertainty calculations enabling automated uncertainties to be calculated at run time depending upon the reference instrument used.

KEY FEATURES

- Assists with compliance to Quality Standards such as ISO 9000 and ISO 17025
 - Create and edit test procedures quickly and easily with a powerful Procedure Wizard
- Multi discipline support for Electrical, Dimensional, Temperature and more
 - Track Customer and Internal asset calibration history with ProCal-Track
 - Generate automated recalibration reminders via E-mail and Letter
 - Powerful reporting tools utilising Crystal Reports
 - Viewable Dynamic Uncertainty calculation to M3003 with customisable templates
 - Generate quotations and invoices using ProSales
 - Enterprise grade database engine



VERSION 6 IMPROVEMENTS

Version 6 is the largest update to ProCal since the first release in 1997, with a complete migration across to a new database engine to support growing companies

Feature	Previous Versions	Version 6
Enterprise Grade Database	Microsoft Access Database	Microsoft SQL Server
Full Screen User Interface		•
Email Recalibration Reminders	Cost option in V5, previous unavailable	Included in ProCal- Track
Export reports to Email		•
Enhanced User Permissions		•
Windows 10 Compatibility		•
Expanded Reference Standards Support		•
Automated Database Backup		•

FLEXIBLE REFERENCE SUPPORT

The unique way that ProCal communicates with reference instruments allows multiple reference standards to be used with the same procedure, removing the requirement to have multiple versions of the same procedure depending upon the equipment available. As you update and replace your laboratory equipment the procedures dynamically update.

ProCal supports all Transmille equipment as well as popular instruments from other manufacturers such as the Fluke 5520A and Keysight 3458A without the need to write instrument commands test by test.

ProCal also supports sending commands to additional references or UUT's via RS232, USB and GPIB on a per test basis for flexibility.

A full list of directly supported references is available at www.transmillecalibration.com

INSTRUMENT LIFE CYCLE

The book in process for ProCal-Track puts checks in place to ensure that compliance to quality standards such as ISO 9000 and ISO 17025 are followed, recording not only that the instrument has been received but also storing digital copies of Purchase Orders, recording accessories such as leads and logging if an electrical safety test has been performed.

Each stage of the process is logged for reference during a quality system audit to assist compliance and traceability

To minimise paperwork through the laboratory the virtual job sheet follows each instrument through the laboratory,

providing an immediate view of the instrument status, progression through the cycle as well as providing digital memo fields for repair reports, customer notes and repair estimates

VIRTUAL JOB SHEET **GENERATED**

INSTRUMENT RECEIVED

FROM CUSTOMER



INSTRUMENT BOOKED IN

GENERATE QUOTATION

RECALIBRATION REMINDER SENT

SOFTWARE KEY

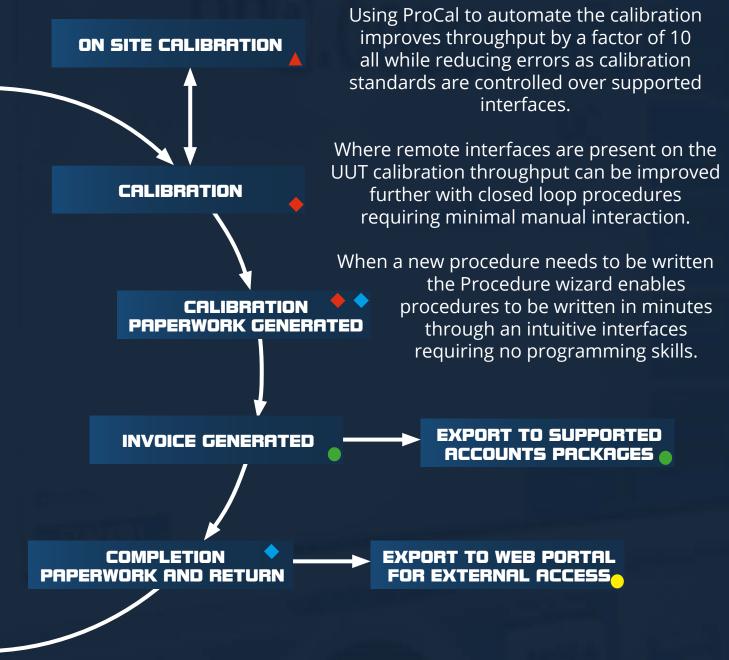
PROCAL • PROCAL-TRACK • PROSALES • PROSITE A PROWER •

To ensure that your customers return their instruments for recalibration, ProCal-Track automates the process of sending recalibration reminders via email and physical mail.

Customisable reports enable you to apply your branding to all reports generated by ProCal, ProCal-Track and ProSales



Engineers and technicians are provided with an automatically generated priority list to ensure that work is performed in the correct order and to the customers requested time frame.



After the calibration has been performed, the software automatically generates the calibration certificate, calibration label and despatch note.

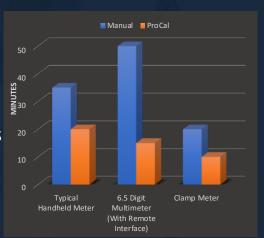
With the optional ProSales module invoices can also be generated with automatic prices linked to the procedure and customer discount levels.

ProSales has the ability to generate export files that can be imported into accounts packages such as Sage through utilities either by Transmille or third party developers

PROCAL

ProCal is the worlds easiest to use calibration software while still providing advanced functions not available in other packages.

Using Transmille's experience as an accredited laboratory, ProCal has been designed by calibration engineers to support all measurements performed in the laboratory with a clear and easy to use interface that provides users with the tools they require to speed up the calibration process through automation.



View measurement

uncertainty

calculation

during run

time from the

measurement

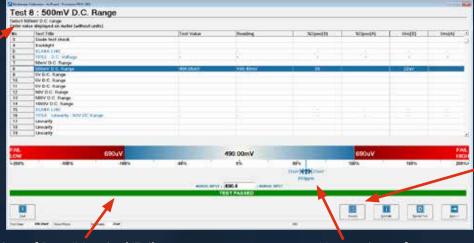
screen to verify

and Audit

calculation

FULL SCREEN USER INTERFACE

Test
instructions
visible as
prompt
screen prior
to testing as
well as during
test



Clear indication of Pass/Marginal/Fail status with traffic light system for intuitive use

Uncertainty of measurement displayed relative to tolerance for clear indication of TUR

DYNAMIC UNCERTAINTY CALCULATION

				ID-01 (
	3010A Precision Multi- Calibration = 0 000339		Line 4	[DCV : 20.	2V to 202V]	
	Stability = 0.0012% + 3					
Source of Uncertainy	Limit Value	Probability Distribution	Div.	c,	±U i	
Imported Uncertainty	33.0fV	Normal	2.0	0.1	1.7fA	
Stability of Reference	252.0uV	Rectangular	√3	.00000000	145.5fA	
Resolution	10.0fA	Rectangular	√3	1.0	5.8fA	
Noise / Flicker	15.0fA	Rectangular	√3	1.0	8.7fA	
esistance Imported Uncertainty	1.0pR	Normal	1.0	1.0	1.0pA	
Resistance Drift	100.0fR	Rectangular	√3	1	57.7fA	
Temp Co-efficient 19-21'C	2.0pA	Rectangular	√3	1	1.2pA	
Thermal EMF	500.0nA	Rectangular	√3	0.0000001	28.9fA	
Combined Standard Uncertainty		Normal			1.5pA	
Expanded Uncertainty		Normal (k=2)			3.1pA	
Yew Uncertainty Evaluation Yew Procedure Manual Dose						

Quality standards such as ISO 17025 require measurement uncertainties to be calculated for each test point, as well as for the uncertainty calculation to be verified during an audit.

ProCal provides dynamic uncertainty calculations and allows the full calculation to be viewed run time and during an audit.

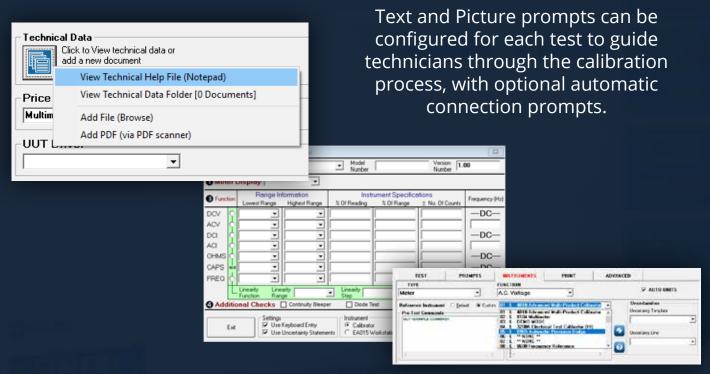
Uncertainty templates can be created, maintained and modified in a familiar interface.

PROEDIT



ProEdit (included with ProCal) provides operators with an easy to use interface which de-skills the process of writing a procedure while ensuring that reference instruments are controlled correctly and safety prompts displayed automatically when high voltage and current output/input is required.

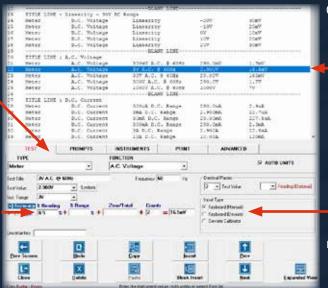
ProEdit offers the ability to store the instrument data-sheet with the procedure for quality purposes and for later reference, as well as automatically generate technical help files for technicians to store useful information such as calibration access passwords or service instructions that can be displayed during calibration.



INTUITIVE USER INTERFACE

Test Type and Function are selected via Drop Down boxes, simply select the Test Type and Function and ProCal will dynamically calculate the commands for the reference instrument

ProEdit dynamically updates the UUT's calculated accuracy as you type, and provides multiple forms of entry with to assist aligning to the UUT's data-sheet



Quickly select any test in your procedure, or overview test sections already completed. Sections can be marked up as optional and can be selected as required during calibration

Select from either direct entry (for digital meters), Keyboard Deviation or deviate the source and record the error for analogue meters and gauges

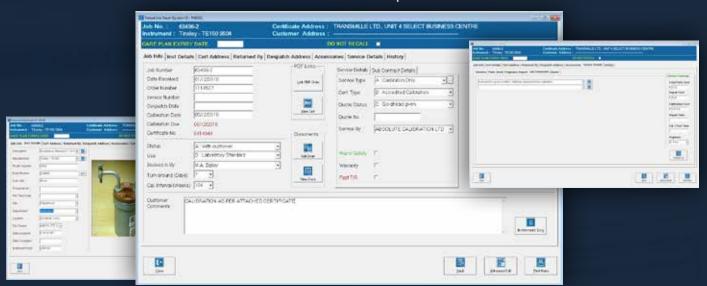
PROCAL-TRACK

ProCal-Track enables the management of Instruments and Assets that enter your laboratory, from receipt of the instrument through to generating despatch paperwork and instrument recalibration reminders.

ProCal-Track allows the operator to register all accessories that arrived with the instrument during the book in process and prevents instruments being despatched without the accessories to ensure correct handling of customers equipment.

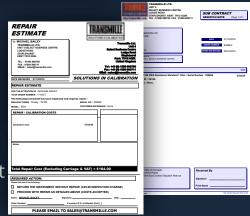
VIRTUAL JOB SHEET

The Virtual Job Sheet in ProCal-Track contains full information about the instruments current and previous jobs, with all information stored securely and available at the click of a button. Each action that is performed is recorded for full traceability, with an engineers log available for any repairs or adjustments that have taken place



EXTENDED REPORTING

Utilising Crystal Reports, ProCal-Track enables the generation of fault reports, engineers reports, subcontract despatch notes and more. Either use the included templates or customise to match your branding using the industry standard Crystal Report format.





REDUCE PAPERWORK & ENSURE CONFORMITY

Never lose an important document again with ProCal-Track's "Link PDF" function. During the book in process orders and customer notes can be scanned and securely stored with the Order for future reference as well as adhering to maintenance of records as required under ISO 9000, ISO 17025 and other quality systems. Scanned documents are viewable at any stage of the calibration process.





Utilise support for Label Printers, Barcode Readers and the virtual job sheet to minimise physical paperwork throughout your organisation. With all current and historical information available for an instrument at the click of a button it has never been easier to simplify work-flow

MANAGE INTERNAL AND EXTERNAL ASSETS

APP	ARATUS IN	VENTORY - ELECT	RICAL (L	IKAS)			
ID	Manufacturer	Description	Model	Serial No.	Last Cal	Cal	Cal Source
T00002	FLUKE	AC/DC TRANSFER STANDARD	792A	5130002	23/03/2017	156	NPL
T00003	Datron	AC Voltmeter	4920	24146-6	20/02/2017	26	Transmille
T00004	Guildline	Resistance 100 Kohm	9330	40678	25/05/2017	52	Absolute
TL1002	Isotech	Galluim Fixed Point Cell	M17401	G016	30/05/2008	999	INT - Verify on u:
TL1020	Transmille	Electrical Test Calibrator	3200A	K1255I11	20/07/2017	52	Transmille
TL1030	Transmille	Precision Multimeter	8091	J1078J11	20/07/2017	52	Transmille
TL1040	Transmille	Precision Multimeter	8081	J1074F11	20/07/2017	52	Transmille
TL1045	Transmille	Multi Product Calibrator	3010A	J1177F13	20/07/2017	52	Transmille
TL1065	Transmille	Multi Product Calibrator	3010	G1026F8	30/07/2017	52	Transmille
TL1070	Transmille	Precision Multimeter	8081	J1207F13	19/07/2017	52	Transmille
TL1080	Transmille	Multi Product Calibrator	3010A	J1143D12	29/03/2017	13	Transmille
TL1085	Transmille	High Resistance Standard	3000HR	110147	30/05/2017	13	Transmille
TL109	TINSLEY	AC/DC 10R RESISTOR	5685A	243580	30/10/2014	104	Before Use
TL1095	Transmille	Precision Multimeter	8091	J1152L12	17/07/2017	52	Transmille
TL110	TINSLEY	AC/DC 1kR RESISTOR	5685B	246788	30/10/2014	104	Before Use
TL118	TINSLEY	AC/DC 100R RESISTOR	5685A	246759	30/10/2014	104	Before Use
TL172	TINSLEY	AC/DC 10K RESISTOR	5685B	243623	30/10/2014	104	Before Use
TL173	Tinsley	Secondary Resistance 0.1 Ohm	1682	244873	10/09/2015	104	Transmille
TL178	TINSLEY	AC/DC 1R RESISTOR	5685A	243549	30/10/2014	104	Before Use
TL318	Fluke - TE318	Fluke K.V.D.	720A	3050008		999	Before Use
TL319	Fluke - TE319	Fluke Lead compensator	721A	3195017		999	Before use
TL335	Fluke - TE335	Fluke Reference divider	750A	3170012		999	Before Use
TL354	Time Elec TE354	Time Null detector	202	1232	14/07/2009	999	Before Use
TL359	Hewlett Packard	8 Digit Multimeter	3458A	2823A01087	19/04/2017	52	Transmille
TL364	HP - TE364	Distortion analyser	339A	2025A05538		999	Before Use
TL366	Transmille	Unity Gain Amplifier	UGA	UGA1	13/10/1998	999	Before Use
TL368	Wayne Kerr - TE368	Capacitance bridge	B905	825	28/04/2017	52	Transmille
TL370	Guildline	Constant teperature Oil Bath	9730CR4	41,366		999	Before Use
TL377	Radiocode - TE377	Frequency generator radio clock	IFS8000A	505-89		999	N/A
TL378	AMF Venner - TE378	Frequency counter	7737	AC02736		999	Before Use
TL604	Digitron	Platinum Resistance Thermomer	PT100 Probe	MRT 8381	01/03/2017	52	Before Use
TL615	USSR Manufacturer	Standard Resistor - 10R	P321	163809	31/05/2017	104	Transmille
TL710	Agilent	Digital Multimeter (8.5 digit)	3458A	US28028898	18/04/2017	52	Transmille
TL750	Thurlby	Multimeter	1905A	F9661	11/07/2012	208	WITH TN749
TL756	Tinsley	1 Ohm Resistor	1659	169699	09/12/2015	104	Transmille
\\Server\Public\Procal\Reports_SQL\UKAS.LABIApparatus Inventory - Electrical (UKAS).rpt					25/07/	2017 Page 1 of 3	
при							

ProCal-Track can be used to manage calibration history for not only your customers instruments but also the internal standards and references used by your own laboratory.

External certificates can be scanned in and linked to the instrument for future reference and safe keeping, with reports that list internal instrument inventory available for use as part of your housekeeping procedures

In addition, ProCal-Track provides immediate links to associated documents for instruments such as drift charts and datasheets

PROSALES

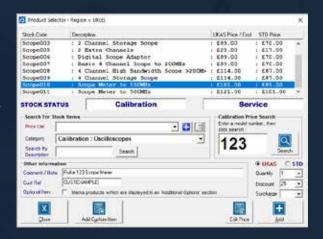
ProSales provides the ability to manage a system wide price list for services and parts, a contacts management system as well as the ability to generate quotes and invoices for calibration work and product sales.

A system wide price list is linked to calibration procedures, meaning a standardised pricing structure across calibration work can be achieved with customer discounts applied to invoiced work. This simplifies generating quotations and invoices as a centralised pricing structure is maintained. When processing an invoice the customers discount level is applied automatically removing the risk of incorrect invoices.

ProSales maintains customers quotation and order history in an easy to

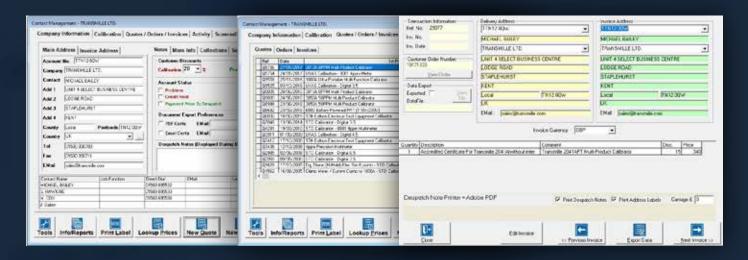
manage structure with a powerful search function allowing historical data to be viewed at any time.

Quoting is made simple as price lists are linked to instrument model numbers, simply search for the customers model number and the appropriate price is displayed ready for including in an attachment. As new instruments are calibrated the database is updated automatically minimising maintenance tasks.



Reports can be generated for customers, providing important business intelligence such as year on year calibration work, quotation history and more.

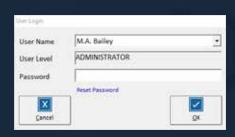
ProSales also offers the ability to export invoice data to supported accounts packages, further reducing duplication of data entry.





BUSINESS ENHANCEMENTS

ENHANCED FOR ENTERPRISE USERS



An updated user login system protects against unauthorised access of data, with SHA-2 512 Encryption used to securely store user passwords.

A new permissions system designed from the ground up allows flexibility in customising user levels throughout the system, preventing unauthorised modifications to system data

Enhanced audit tracking has been extended throughout the ProCal Suite to provide management with detailed views on user actions, data changes and flow throughout the laboratory





An Integrated backup utility to ensure that regular backups are being performed is provided free of charge to simplify the process of ensuring regular backups are being maintained

WORK FLOW MANAGEMENT

As Instruments are booked into ProCal-Track, a dynamic priority list is automatically generated to assist with managing the work flow throughout the laboratory. Engineers and operators have clear priorities and management staff can get immediate feedback for emerging issues and missed deadlines



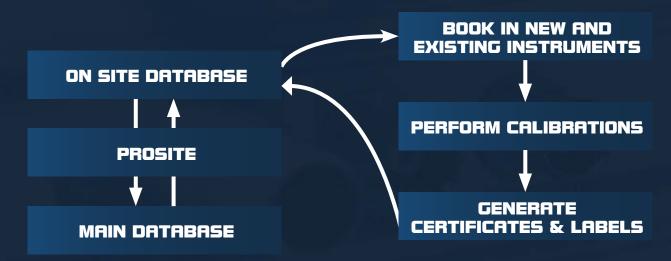
PROSITE



When performing on site calibration your engineers have many jobs to perform, and making sure there is a stable internet connection should not be one of them.

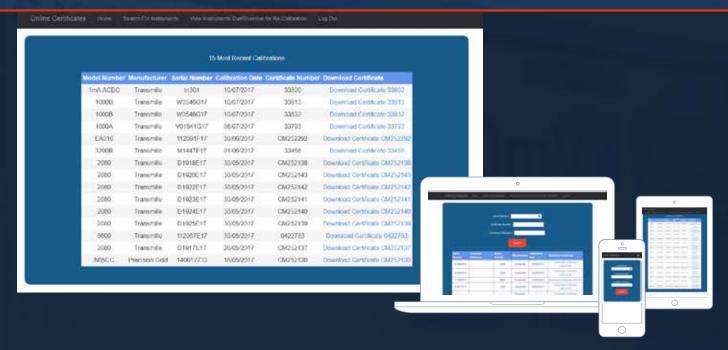
With ProSite, you can check out only the data for the required customers and ProSite will ensure that your site laptop has historical calibration records, calibration procedures and any other required information. Use ProCal and ProCal track as normal during your site visit and import the updated data on return. Certificates and labels can be generated on site and left with the customer as all data is re-integrated.

ProSite makes the export and import of site data a simple task and allows more work to be performed faster. As ProCal is used on the site laptop there is no learning curve, and only the data for selected customers is exported to minimise data theft risks.







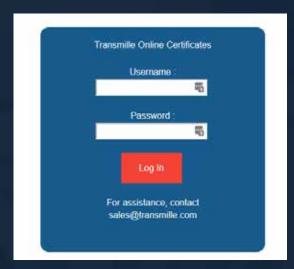


ProWeb provides your customers and users with a modern web portal to view instruments and download calibration certificates. PDF copies of certificates are automatically generated and uploaded to your web portal for registered users to download at their leisure.

Uploaded data is viewable on any device with a web browser, any time, any where. Using modern web technologies the ProWeb portal scales to fit your users device dynamically to make the best use of available screen.

Your customers data is kept secure with registered users only able to access instruments registered to their account, removing the requirement for multiple portals.

Only customers that have been registered for online access will have their data uploaded to protect customers that have strict data requirements



ProWeb is scalable from 1 to 1,000 users and beyond. The ProWeb licence includes unlimited web users, and templates are fully customisable to match your branding.

To simplify configuring a web portal, an option to have your web portal deployed to Microsoft Azure® by Transmille is available

Visit http://certificates.transmille.com for an online demonstration

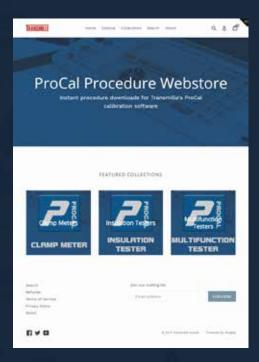
SUPPORT PACKAGES

Transmille offer a range of support packages to keep your software up to date and provide you with assistance if the need arises.

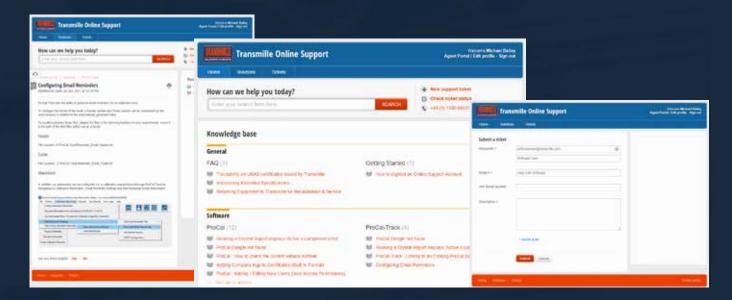
Annual software support packages are offered for each core piece of software or full support packages that cover the whole suite are offered depending upon your requirements.

Software support subscribers benefit from:

- Minor Version Updates
- New Features
- · Example Crystal Reports
- · Procedure Store Credit (£2,400 annually)
- · Discounts on custom procedure development
- · Discounts on custom report development
- · Priority Remote, Phone and Email Support
- · Database Services



Subscribers also gain access to training Webinars which are held throughout the year to improve their understanding of not only the software but also metrology techniques.



TRANSMILLE RDVRNCED METROLOGY SYSTEMS

OPTIONS AND REQUIREMENTS

NEW USERS

ProCal, ProCal-Track and ProSales Version 6 is purchased per concurrent user and can be installed on as many computers as required

UPGRADES

Users migrating to Version 6 from previous versions require an upgrade for each active login of the software. Legacy data is migrated to the new database with no data loss and with minimal effort

ADDITIONAL LICENCES

Additional Licences are available at any time as your requirements change, simply contact your local representative

REQUIREMENTS

Database Server:

- Windows 7 (64 Bit)
- Windows 8/8.1 (64 Bit)
- Windows 10 (64 Bit)
- Windows Server 2008 R2
- Windows Small Business Server 2011
- Windows Server 2012 onwards

- 2.0 GHz quad core or equivalent
- 8GB of RAM (16GB Recommended)
- 20GB available hard drive space

Client:

- Windows 7 (32 and 64 Bit)
- Windows 8/8.1 (32 and 64 Bit)
- Windows 10 (32 and 64 Bit)

- 2.0 GHz quad core or equivalent
- 2GB of RAM (4GB Recommended)
- 5GB available hard drive space
- Screen Resolution 1024 x 768

Web Portal:

- Windows Web Server Running SQL Server 2012 or Higher or
- Microsoft Azure Subscription

The most up to date list of requirements is available at www.transmillecalibration.com