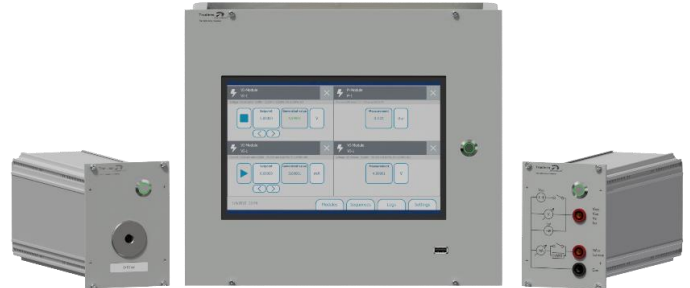# Datasheet Metis Intelligent Series

AutoCal+
The Calibration Software®

- ✓ Pressure and signal measurement
- ✓ Modular calibration system
- ✓ Large color touchscreen
- ✓ Accuracy, up to ± 0.01% F.S.
- ✓ Easy to use
- ✓ Software
- ✓ Vacuum and pressure up to 1000 barg

The modular platform consists of a central control module to which several measurement and control modules can be connected. The 10-inch touchscreen with multilingual user interface makes operating of all modules quick and easy. In addition, Metis fully integrates with the Cloud operated Tradinco calibration software AutoCal+, enabling fast and paperless calibration.

Modular design
The Metis series fit seamlessly into our calibration test bench solutions. This multifunction platform creates an easy working environment for all necessary test and calibration activities.

Customization
Metis stands for optimal customization. You decide which modules are connected to the Metis modular platform. When modules are connected, the user decides from which module the information is presented on the main module.

Ease of use
Thanks to the automatic recognition and color signal indication on each module, the user can immediately see which modules are active. This avoids unexpected errors and downtime.

About Tradinco Instruments

Tradinco Instruments provides the best solution for every test, measurement and calibration challenge in the industry.

Our brand promises:
√ Skilled specialists
√ Customer focus
√ Broad portfolio
√ Long-term partnership

Technical specifications main module

General	
Operating temperature	Between 0 and 40°C
Housing	6HE/64TE
Dimensions	266,7mm x 325,1mm x 235mm (W x D x H)
Weight	Approx. 5 kg depending on configuration
Display	10-inch capacitive touch
Data visualisation	Up to 4 modules simultaneously
Programs	Running automatic procedures and sequences
Logging	Excel data logging and export
Custom units	User defined thru gain and offset

Interfaces	
USB front	USB A to accept thumb drives for firmware update and data export
USB back	USB A multi-purpose
HDMI back	For connection of external screen (mirrored output)
Private ethernet	For connection to internal 8 channel PoE switch
Public ethernet	For connection to factory network
Button front	On/off button with status light
Modules	Automatic recognition and integration of measurement modules
Max modules	100 Metis modules

Power supply	
Voltage	110 ~ 240 VAC, 1 phase
Power	305 Watt max
Frequency	50 ~ 55 Hz / 60 Hz
Power plug	Harting Han ES-6 male connector

Compliance	
EMC	EN 61326-1 emission (group 1, class A) and immunity
Low voltage directive	EN 61010-1
RoHS	EN-2011/65/EU with amendment EN 50581

Specifications of the product may be changed without notice

Technical specifications pressure module

General	
Accuracy	± 0.02% F.S.
Operating temperature	Between 0 and 40°C All stated accuracies include linearity, hysteresis and repeatability
Operating ambient humidity	0 … 95% RH non-condensing
Storage temperature	-10 … 50°C
Sensor range	25, 70, 200, 350, 700, 1000 mBar G, 1, 2, 3,5, 7, 10, 20, 35, 70, 100, 135, 175, 250, 300, 1000 Bar G All ranges < 1 Bar G are available with negative range up to +max sensor value All ranges < 1 Bar G are available with negative range up to +max sensor value
Media	Air, nitrogen, hydraulic
Permissible overpressure	Pmax +10%
Pressure units	Bar, hPa, kPa, MPa, PSI, kgf/cm^2, mmH$_2$O, cmH$_2$O, mH$_2$O, inH$_2$O, ftH$_2$O, mmHg, inHg, torr, %, mSeaw, User defined using gain and offset
Pressure control	Pneumatic pressure control in combination with the Traqc-9 C series manual pressure controllers
Connections	Pressure ¼"npt female
Power/interface	RJ45 Ethernet connection to PoE switch on main module
Button	With multi-color led for status and identification purposes
Housing	3HE / 18TE
Dimensions weight	133,3mm x 91,4mm x 235mm (W x D x H)
Weight	Approx. 1,3kg depending on configuration

Compliance	
EMC	EN 61326-1 emission (group 1, class A) and immunity
Low voltage directive	EN 61010-1
RoHS	EN-2011/65/EU with amendment EN 50581

Low pressure polyflo parts max 10 bar

Polyflo ¼"npt male body with shut-off: Model 298-PT

Insert without shut-off model 294-PM polyethylene tubing for vacuum applications: Model 44-P-04

Flexible polyurethane tubing: Model 8635 low pressure polyflo connection set max. 10 barg

High pressure minimess 1215 connection parts

¼"npt test point (with plastic cap): Model 2101-01-47.00

Micro bore flex hose, 150cm: Model S100-AA-AA-0150

High pressure minimess 1215 connection set max 400 barg: Model 8610

Accredited calibration certificate for pressure sensor(s), traceable to international standards.

Specifications of the product may be changed without notice

Technical specifications VI-module

Measurement	
Voltage measurement	-30 ÷ 30 VDC
Voltage generation	0 ÷ 12 VDC
Current measurement	-24 ÷ 24 mA
Current generation	0 ÷ 24 mA
Hart resistor	249 ohm
Loop supply	20 VDC
Electrical connections	4,2 mm banana plugs
Power/interface	RJ45 Ethernet connection to PoE switch on main module
Button	With multi-color led for status and identification purposes
Housing	3HE / 18TE
Dimensions weight	133,3mm x 91,4mm x 235mm (W x D x H)
Weight	Approx. 0,8 kg

Compliance	
EMC	EN 61326-1 emission (group 1, class A) and immunity
Low voltage directive	EN 61010-1
RoHS	EN-2011/65/EU with amendment EN 50581 : 2012

Options
Accredited calibration certificate for electrical ranges, traceable to international standards
Set of 4mm electrical test leads

Specifications of the product may be changed without notice

Technical specifications LEM-Module

Measurement	
Atmospheric pressure	-950 … 1050 mbara
Accuracy	± 0.02% F.S.
Ambient temperature	-40 … 125°C
Accuracy	± 0.1°C
Ambient humidity	0 … 100% RH
Accuracy	± 1.5% RH

Environmental conditions	
Operating temperature	Between 0 and 40°C All stated accuracies include linearity, hysteresis and repeatability
Operating ambient humidity	0 … 95% RH non-condensing
Storage temperature	-10 … 50°C
Power/interface	RJ45 Ethernet connection to PoE switch on main module
Button	With multi-color led for status and identification purposes
Housing	3HE / 18TE
Dimensions weight	133,3mm x 91,4mm x 235mm (W x D x H)
Weight	Approx. 0,8 kg

Compliance	
EMC	EN 61326-1 emission (group 1, class A) and immunity
Low voltage directive	EN 61010-1
RoHS	EN-2011/65/EU with amendment EN 50581 : 2012

Options	
Accredited calibration certificate for Atmospheric pressure, traceable to international standards	

Specifications of the product may be changed without notice