

A/D Probe Converter

In connection with the FieldMan® field meter

With the A/D Probe Converter it is possible to use NBM probes in conjunction with the FieldMan. The A/D Probe Converter is connected as an interface between the probe and the FieldMan. The signal of the analog NBM probe is converted into digital information and forwarded to the FieldMan. There is no probe limitation. The existing NBM probes can be used with the FieldMan through the A/D Probe Converter. Alternatively, NBM probes can also be connected to the Digital Broadband Probe Repeater by means of the A/D Probe Converter.

- › Very little influence on the measurement result
- › The majority of the FieldMan product portfolio can be used
- › Compatible with the Digital Broadband Probe Repeater
- › Automatic offset correction from -20 °C to +50 °C
- › Each A/D Probe Converter is delivered with a CAL certificate

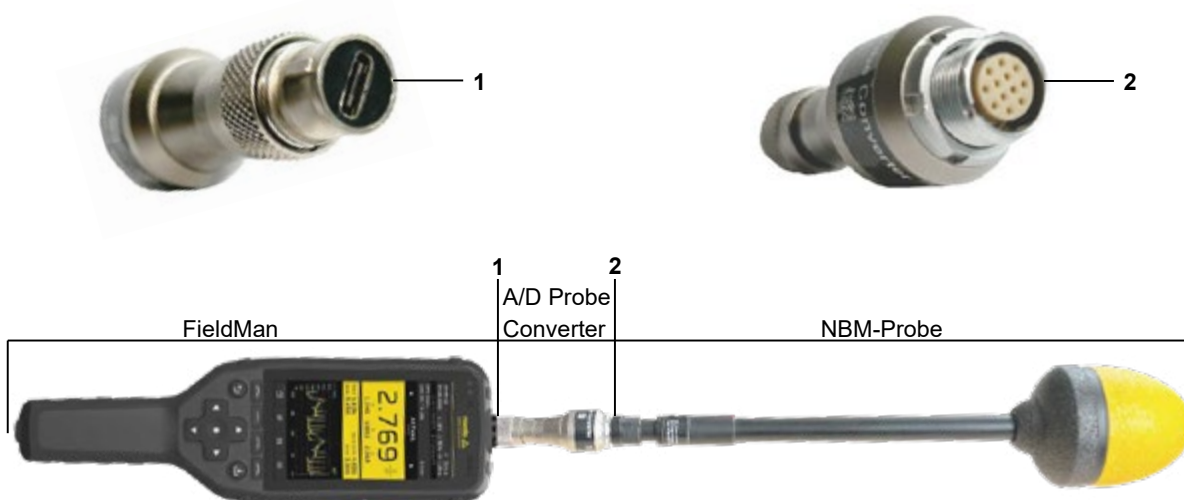


Specifications ¹

General data and product features	
Compatibility	FieldMan 2460/01 ; Digital Broadband Probe Repeater 2464/01 ; all NBM probes
Frequency range	Covers the frequency range of all NBM probes
Recommended calibration interval	24 months
Input (analog)	Connection for any NBM probe
Output (digital)	Connection to the FieldMan
RF- immunity	200 V/m (100 kHz to 60 GHz); can be below the permissible measuring range of a probe
Power Supply	Supplied via the FieldMan
Dimensions (L x D)	82 mm x 25 mm
Weight	100 g
Country of origin	Germany

Environmental conditions		
Application area		Suitable for outdoor use and an operating altitude of up to 5000 m
Operating temperature range		-20 °C to +50 °C
Humidity		< 29 g/m³ (< 93 % RH at +30 °C), no condensation
Intrusion protection		IP54 (with screwed on probe / adapter)
Climatic conditions	Storage	1K5 (IEC 60721-3) -20 °C to +50 °C
	Transport	2K3 (IEC 60721-3) -30 °C to +70° C
	Operating	7K2 (IEC 60721-3) extended to -20 °C to +50 °C

Device connections	
1	Digital connection for the FieldMan
2	Connection for analog probes of the NBM



¹ Unless otherwise noted specifications apply at reference condition: device in far-field of source, ambient temperature 23±3 °C.

Definitions and Conditions

Conditions

Unless otherwise noted, specifications apply after 30 minutes warm-up time within the specified environmental conditions. The product is within the recommended calibration cycle.

Specifications with limits

These describe product performance for the given parameter covered by warranty. Specifications with limits (shown as $<$, \leq , $>$, \geq , \pm , max., min.) apply under the given conditions for the product and are tested during production, considering measurement uncertainty.

Specifications without limits

These describe product performance for the given parameter covered by warranty. Specifications without limits represent values with negligible deviations, which are ensured by design (e.g. dimensions or resolution of a setting parameter).

Typical values (typ.)

These characterize product performance for the given parameter that is not covered by warranty. When stated as a range or as a limit (shown as $<$, \leq , $>$, \geq , \pm , max., min.), they represent the performance met by approximately 80% of the instruments. Otherwise, they represent the mean value. The measurement uncertainty is not taken into account.

Nominal values (nom.)

These characterize expected product performance for the given parameter that is not covered by warranty. Nominal values are verified during product development but are not tested during production.

Uncertainties

These characterize the dispersion of the values attributed to the measurands with an estimated confidence level of approximately 95%. Uncertainty is stated as the standard uncertainty multiplied by the coverage factor $k=2$ based on the normal distribution. The evaluation has been carried out in accordance with the rules of the "Guide to the Expression of Uncertainty in Measurement" (GUM).

Ordering Information

Designation	Part number
A/D Probe Converter for NBM probes	2465/01
Field meter FieldMan	Part number
FieldMan Basic Set	2460/101
Optional accessories	Part number
Digital Broadband Probe Repeater – <i>Charger and optical cable not included</i> –	2464/01