



The coverage factor k explained

Introduction

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PTB JCGM 100

Prerequisites for its application

measurement model <i>f</i>	 – exists, includes all input quantities – (sufficiently) linear as LPU is first-order approximation – derivatives known (analytically, numerically, experim.)
coverage interval	 – symmetric: expanded uncertainty U=ku – guidance only for Normally distr. measurand Y
measurand	– scalar, well-defined
type A quantiti	es – independent observations

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otherwise apply Monte Carlo method (JCGM 101)

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PTB Video "The coverage factor k explained"



Video "The coverage factor k explained – From u to U"

- by **PTB**, Accredia, CEM, DAM, GUM, IMBiH, IMS SAS, INRIM, IPQ, LNE, UKN
- explains the origin of *k*=2 for expanded U and when this choice may be inappropriate
- freely available at:

https://www.euramet.org/european-metrology-networks/mathmet/activities/ measurement-uncertainty-training-activity/for-trainees-measurement-uncertainty-training

in English, German, Spanish, Bosnian, Slovakian

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• feedback welcome