

# ISO Geodetic Registry

<i>Item class</i>	Conversion	
<i>Name</i>	<b>UTM zone 45N</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	890	
<i>Alias</i>	UTM zone 45	
<i>Information source</i>	<i>Title</i>	The Universal Grids and the Transverse Mercator and Polar Stereographic Map Projections
	<i>Author</i>	National Geospatial-Intelligence Agency (NGA)
	<i>Publisher</i>	National Geospatial-Intelligence Agency (NGA)
	<i>Revision date</i>	2014-03-25
	<i>Series/Journal name</i>	National Geospatial-Intelligence Agency Standardization Document
	<i>Issue identification</i>	NGA.SIG.0012_2.0.0_UTMUPS Version 2.0.0
	<i>Other citation details</i>	<a href="https://nsgreg.nga.mil/doc/view?i=4056&amp;month=3&amp;day=28&amp;year=2022">https://nsgreg.nga.mil/doc/view?i=4056&amp;month=3&amp;day=28&amp;year=2022</a> (accessed 2022-04-20)
	<i>Title</i>	Geomatics Guidance Note No 7, part 2: Coordinate Conversions and Transformations including Formulas
	<i>Author</i>	International Association of Oil and Gas Producers (IOGP)
	<i>Publisher</i>	International Association of Oil and Gas Producers (IOGP)
<i>Information source</i>	<i>Revision date</i>	2021-11
	<i>Edition</i>	61
	<i>Series/Journal name</i>	IOGP Publication
	<i>Issue identification</i>	373-7-2
	<i>Other citation details</i>	<a href="https://epsg.org/guidance-notes.html">https://epsg.org/guidance-notes.html</a> (accessed 2022-01-19)
	<i>Data source</i>	ISO Geodetic Registry
	<i>Scope</i>	Spatial referencing
<i>Operation method</i>	Transverse Mercator Projection	

## Extent

<i>Description</i>	<b>World - onshore and offshore - between 84°E and 90°E, northern hemisphere between equator and 84°N.</b>	
<i>Geographic Bounding Box</i>	<i>West-bound longitude</i>	84.0
	<i>North-bound latitude</i>	84.0
	<i>East-bound longitude</i>	90.0
	<i>South-bound latitude</i>	0.0

## Operation parameter values

<i>Latitude of natural origin</i>	0.0 degree
<i>Longitude of natural origin</i>	87.0 degree
<i>Scale factor at natural origin</i>	0.9996 unity
<i>False easting</i>	500000.0 metre
<i>False northing</i>	0.0 metre

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<i>Item class</i>	OperationMethod
<i>Name</i>	<b>Transverse Mercator Projection</b>
<i>Item status</i>	VALID
<i>Identifier</i>	834
<i>Alias</i>	Gauss-Boaga
<i>Alias</i>	TM
<i>Alias</i>	Gauss-Kruger
<i>Data source</i>	ISO Geodetic Registry

## Operation parameters

<i>Latitude of natural origin</i>
<i>Longitude of natural origin</i>
<i>Scale factor at natural origin</i>
<i>False easting</i>
<i>False northing</i>