

# Circular Economy Ontology Network (CEON) - Quantity Module

## Metadata

### IRI

<http://w3id.org/CEON/ontology/quantity/>

### Title

Circular Economy Ontology Network (CEON) - Quantity Module

### Creator

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### License

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### Version Iri

<http://w3id.org/CEON/ontology/quantity/0.2/>

### Version Info

0.2

### Preferred Namespace Prefix

quantity

### Preferred Namespace Uri

<http://w3id.org/CEON/ontology/quantity/>

### Description

This module defines base properties to describe quantities with standardized units.

## Classes

### Quantity Interval<sup>c</sup>

#### IRI

<http://w3id.org/CEON/ontology/quantity/QuantityInterval>

#### In Domain Of

[hasMaximalValueIncludedOfInterval<sup>op</sup>](#)  
[hasMaximalValueNotIncludedOfInterval<sup>op</sup>](#)  
[hasMinimalValueIncludedOfInterval<sup>op</sup>](#)  
[hasMinimalValueNotIncludedOfInterval<sup>op</sup>](#)

## Object Properties

### has dimension<sup>op</sup>

#### IRI

<http://w3id.org/CEON/ontology/quantity/hasDimension>

#### Sub Property Of

[qudt:quantityValue](#)

#### Super Property Of

- [hasHeight<sup>op</sup>](#)
- [hasLength<sup>op</sup>](#)
- [hasThickness<sup>op</sup>](#)
- [hasWidth<sup>op</sup>](#)

has dismantling cost<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasDismantlingCost>

**Sub Property Of** [hasProcessCost<sup>op</sup>](#)

has height<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasHeight>

**Sub Property Of** [hasDimension<sup>op</sup>](#)

has length<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasLength>

**Sub Property Of** [hasDimension<sup>op</sup>](#)

has market value<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasMarketValue>

**Sub Property Of** [qudt:quantityValue](#)

has maximal value included of interval<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasMaximalValueIncludedOfInterval>

**Sub Property Of** [qudt:quantityValue](#)

**Domain** [QuantityInterval<sup>c</sup>](#)

**Range** [qudt:QuantityValue](#)

has maximal value not included of interval<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasMaximalValueNotIncludedOfInterval>

**Sub Property Of** [qudt:quantityValue](#)

**Domain** [QuantityInterval<sup>c</sup>](#)

**Range** [qudt:QuantityValue](#)

has minimal value included of interval<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasMinimalValueIncludedOfInterval">http://w3id.org/CE0N/ontology/quantity/hasMinimalValueIncludedOfInterval</a>
<b>Sub Property Of</b>	<a href="#">gudt:quantityValue</a>
<b>Domain</b>	<a href="#">QuantityInterval</a> <sup>c</sup>
<b>Range</b>	<a href="#">gudt:QuantityValue</a>

has minimal value not included of interval<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasMinimalValueNotIncludedOfInterval">http://w3id.org/CE0N/ontology/quantity/hasMinimalValueNotIncludedOfInterval</a>
<b>Sub Property Of</b>	<a href="#">gudt:quantityValue</a>
<b>Domain</b>	<a href="#">QuantityInterval</a> <sup>c</sup>
<b>Range</b>	<a href="#">gudt:QuantityValue</a>

has price<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasPrice">http://w3id.org/CE0N/ontology/quantity/hasPrice</a>
<b>Sub Property Of</b>	<a href="#">gudt:quantityValue</a>

has process cost<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasProcessCost">http://w3id.org/CE0N/ontology/quantity/hasProcessCost</a>
<b>Sub Property Of</b>	<a href="#">gudt:quantityValue</a>
<b>Super Property Of</b>	<ul style="list-style-type: none"><li><a href="#">hasDismantlingCost</a><sup>op</sup></li><li><a href="#">hasRecyclingCost</a><sup>op</sup></li><li><a href="#">hasRefurbishmentCost</a><sup>op</sup></li><li><a href="#">hasTestingCost</a><sup>op</sup></li><li><a href="#">hasTransportCost</a><sup>op</sup></li></ul>

has recycling cost<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasRecyclingCost">http://w3id.org/CE0N/ontology/quantity/hasRecyclingCost</a>
<b>Sub Property Of</b>	<a href="#">hasProcessCost</a> <sup>op</sup>

has refurbishment cost<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/quantity/hasRefurbishmentCost">http://w3id.org/CE0N/ontology/quantity/hasRefurbishmentCost</a>
<b>Sub Property Of</b>	<a href="#">hasProcessCost</a> <sup>op</sup>

has testing cost<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasTestingCost>

**Sub Property Of** [hasProcessCost<sup>op</sup>](#)

has thickness<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasThickness>

**Sub Property Of** [hasDimension<sup>op</sup>](#)

has transport cost<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasTransportCost>

**Sub Property Of** [hasProcessCost<sup>op</sup>](#)

has volume<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasVolume>

**Sub Property Of** [qudt:quantityValue](#)

has weight<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasWeight>

**Sub Property Of** [qudt:quantityValue](#)

has width<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/hasWidth>

**Sub Property Of** [hasDimension<sup>op</sup>](#)

object value<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/quantity/objectValue>

**Sub Property Of** [topObjectProperty<sup>op</sup>](#)

## Datatype Properties

numerical max value <sup>dp</sup>	
IRI	<a href="http://w3id.org/CE0N/ontology/quantity/numericalMaxValue">http://w3id.org/CE0N/ontology/quantity/numericalMaxValue</a>
Range	<a href="#">xsd:double</a>

numerical min value <sup>dp</sup>	
IRI	<a href="http://w3id.org/CE0N/ontology/quantity/numericalMinValue">http://w3id.org/CE0N/ontology/quantity/numericalMinValue</a>
Sub Property Of	<a href="#">topDataProperty</a> <sup>dp</sup>
Range	<a href="#">xsd:double</a>

## Annotation Properties

creator <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/creator">http://purl.org/dc/terms/creator</a>

description <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/description">http://purl.org/dc/terms/description</a>

title <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/title">http://purl.org/dc/terms/title</a>

preferred namespace prefix <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespacePrefix">http://purl.org/vocab/vann/preferredNamespacePrefix</a>

preferred namespace uri <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespaceUri">http://purl.org/vocab/vann/preferredNamespaceUri</a>

## Namespaces

:

<http://w3id.org/CE0N/ontology/quantity/>

**dcterms** <http://purl.org/dc/terms/>

**owl** <http://www.w3.org/2002/07/owl#>

**prov** <http://www.w3.org/ns/prov#>

**qudt**

<http://qudt.org/schema/qudt/>

**qudt-unit**

<http://qudt.org/vocab/unit/>

**rdf**

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>

**rdfs**

<http://www.w3.org/2000/01/rdf-schema#>

**vann**

<http://purl.org/vocab/vann/>

**xsd**

<http://www.w3.org/2001/XMLSchema#>

## Legend

<b>c</b>	Classes
<b>op</b>	Object Properties
<b>dp</b>	Datatype Properties
<b>ap</b>	Annotation Properties