

## Modul:Convert/extra

---

This module can be used to quickly add a new unit for use with [Vorlage:TI](#). When satisfied that a unit is working correctly, ask at [Module talk:Convert](#) for the unit to be moved to the permanent list of units.

See [Template:Convert/unit sandbox](#) for a good way to prepare unit definitions that can be copied into this page.

The following extracts from [Module:Convert/data](#) show examples that could be used to define a new unit. Any number of spaces can be used where blanks are shown in the following.

### Vorlage:Collapse top

```
-- These are EXAMPLES on the documentation page. Scroll down to see the module content.
local extra_units = {
  -- Similar to a redirect: "sqm" is an alias for "m2".
  -- {{convert|1.5|m2|sp=us}} → 1.5 square meters (16 sq ft)
  -- {{convert|1.5|sqm|sp=us}} → 1.5 square meters (16 sq ft)
  ["sqm"] = {
    target = "m2",
  },
  -- A simple unit, showing the minimum that is required.
  -- The "ha" is the unit code used to identify the unit:
  -- {{convert|1.5|ha}} → 1.5 hectares (3.7 acres)
  ["ha"] = {
    name1 = "hectare",
    symbol = "ha",
    utype = "area",
    scale = 10000,
    default = "acre",
  },
  -- A unit which accepts an SI prefix. There is no "name1" field because it
  -- has to be constructed (mJ gives "millijoule"; MJ gives "megajoule").
  -- {{convert|125|kJ}} → 125 kilojoules (30,000 cal)
  ["J"] = {
    _name1 = "joule",
    _symbol = "J",
    utype = "energy",
    scale = 1,
    prefixes = 1,
    default = "cal",
    link = "Joule",
  },
  -- A unit where US and plural names are required.
  -- {{convert|125|cm/s2}} → 125 centimetres per second squared (4.1 ft/s2)
  ["cm/s2"] = {
    name1 = "centimetre per second squared",
    name1_us = "centimeter per second squared",
    name2 = "centimetres per second squared",
    name2_us = "centimeters per second squared",
    symbol = "cm/s<sup>2</sup>",
    utype = "acceleration",
    scale = 0.01,
  },
}
```

```

    default = "ft/s2",
    link     = "Gal (unit)",
  },
  -- A "per" unit is defined as the ratio of two other units.
  -- {{convert|125|g/cm3}} → 125 grams per cubic centimetre (4.5 lb/cu in)
  ["g/cm3"] = {
    per      = { "g", "cm3" },
    utype    = "density",
    default  = "lb/cuin",
  },
  -- If the automatic "per" link is not wanted, a link can be specified.
  -- {{convert|125|g/cm3|lk=on|disp=unit}} → [[gram]]s per [[cubic centimetre]]
  -- {{convert|125|g/m3|lk=on|disp=unit}} → [[density|grams per cubic metre]]
  ["g/m3"] = {
    per      = { "g", "m3" },
    utype    = "density",
    default  = "lb/cuyd",
    link     = "density",
  },
  -- Characters "$" and "f" are recognized as currency symbols.
  -- {{convert|125|$/acre}} → $125 per acre ($310/ha)
  ["$/acre"] = {
    per      = { "$", "acre" },
    utype    = "cost $ per unit area",
    default  = "$/ha",
  },
  -- An output unit can be defined as a combination of existing units.
  -- {{convert|2|ha|ft2 m2}} → 2 hectares (220,000 sq ft; 20,000 m²)
  -- Any number of output units can be specified.
  -- NOTE: There may be no need to define a combination because a convert
  --       can specify the output by joining unit codes with "+":
  -- {{convert|1.2|acre|ft2+yd2+m2}} → 1.2 acres (52,000 sq ft; 5,800 sq yd; 4,900 m²)
  ["ft2 m2"] = {
    combination = { "ft2", "m2" },
    utype       = "area",
  },
  -- An output unit can be defined using subunits (from least to most significant).
  -- {{convert|90|in|ydftin}} → 90 inches (2 yd 1 ft 6 in)
  ["ydftin"] = {
    combination = { "in", "ft", "yd" },
    multiple    = { 12, 3 },
    utype       = "length",
  },
}

```

Vorlage:Collapse bottom

Field	Description
symbol	Unit identifier used when abbr=on is in effect.
name1	Singular name of the unit used when abbr=off is in effect.
name2	Plural name of the unit; not required if it is the same as name1 plus "s".
name1_us	Singular name when sp=us is in effect; not required if the same as name1.

name2_us	Plural name when sp=us is in effect; not required if the same as name1_us plus "s".
utype	Unit type; must be exactly the same as the utype of any other unit used in a conversion.
scale	Number of base units in the unit being defined.
default	Unit code of the default output used when no output unit is specified in a conversion.
target	Unit code of an existing unit (the unit being defined "redirects" to the existing unit).
prefixes	Use 1 if an SI prefix is accepted; 2 is used for m <sup>2</sup> , and 3 is used for m <sup>3</sup> .
link	Article title used when lk=on is in effect; not required if it is the same as name1.

### Vorlage:Anchor

```
-- Extra conversion data used by Module:Convert.
--
-- [[Module:Convert/data]] defines all units and is transcluded in all pages
-- where [[Module:Convert]] is used. Testing new units by editing that module
-- would invalidate the cache for all affected pages.
--
-- For quick changes and experiments with new units, this module can be edited.
-- Since this module is transcluded in only a small number of pages, changes
-- should cause little server overhead and should propagate quickly.
--
-- If a unit is defined in the data module, any definition here is ignored,
-- so defining the same unit in both modules is not an error.
-- A unit defined here can refer to units that are also defined here, and
-- can refer to units defined in the data module.
--
-- Periodically, those extra units that are wanted permanently can be removed
-- from here after being added to [[Module:Convert/data]].

local extra_units = {
}

return { extra_units = extra_units }
```