Formatting Technical Memo with Quarto

A minimum example using the quarto-tech-memo extension

First Author
Magic Technologies SA
abc@email.ch

Summary This is an minimum technical memo containing the usual elements of technical writing: figure, table, equation, citation, bibliography, code snippet, and appendix. The document is rendered to PDF by Quarto with a custom extension which provides several styles. A memo style (inspired from Tufte handout style) for brief report, a 2-column paper style for scientific article, and a A3 poster style. The PDF is rendered with the modern Typst engine, which is built into Quarto.

Keywords: Quarto, technical writing, memo, paper, poster

1 Overview

The minimum example contains all standard elements of a technical writing to illustrate the formatting styles provided by the quarto-tech-memo extension. Let's start with some math: $e^{\pi i} + 1 = 0$ is an inline equation, Eq. (1) is a numbered equation. Here is a physical quantity with unit: 1 µT (1 microtesla), note the thin non-breaking space. In IEEE legacy PDF, one need to use the math mode or the SI unit package to render the greek letters.

$$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \varepsilon_0 \frac{\partial \mathbf{E}}{\partial t} \qquad (1)$$

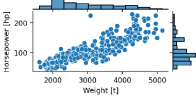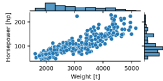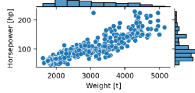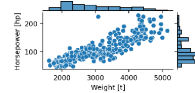[1] is a citation in IEEE style. Figure 1 shows a numbered figure. Table 1 is a numbered table.

In memo style, margin notes are supported, including small inline image. They shouldn't be used in 2-column paper style.

Figure 1: Figure caption.

Table 1: Example of engineering table

Parameter	Symbol	Typ	Unit
Hall sensitivity	S_H	0.2	V/T
Effective nr. of bits	ENOB	12	-

Syntax highlighting is supported in code snippet too. Moreover, callout boxes are available for tips, notes, warnings, and important remarks, with appropriate icons or colors.

```python
def f(x, square=True):
    # Python code snippet
    return (x**2) if square else x
```

> ℹ **Markdown syntax**
>
> The manuscript is written in Markdown, a plain-text **easy syntax**.

2 Dummy text

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis sagittis posuere ligula sit amet lacinia. Duis dignissim pellentesque magna, rhoncus congue sapien finibus mollis. Ut eu sem laoreet, vehicula ipsum in, convallis erat. Vestibulum magna sem, blandit pulvinar augue sit amet, auctor malesuada sapien. Nullam faucibus leo eget eros hendrerit, non laoreet ipsum lacinia. Curabitur cursus diam elit, non tempus ante volutpat a. Quisque hendrerit blandit purus non fringilla. Integer sit amet elit viverra ante dapibus semper. Vestibulum viverra rutrum enim, at luctus enim posuere eu. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

References

[1] G. Close, "Technical Writing and Publishing Data-Rich Articles with Quarto," Sep. 22, 2022. [Online]. Available: https://towardsdatascience.com/technical-writing-and-publishing-data-rich-articles-with-quarto-d61a56bcaa64/