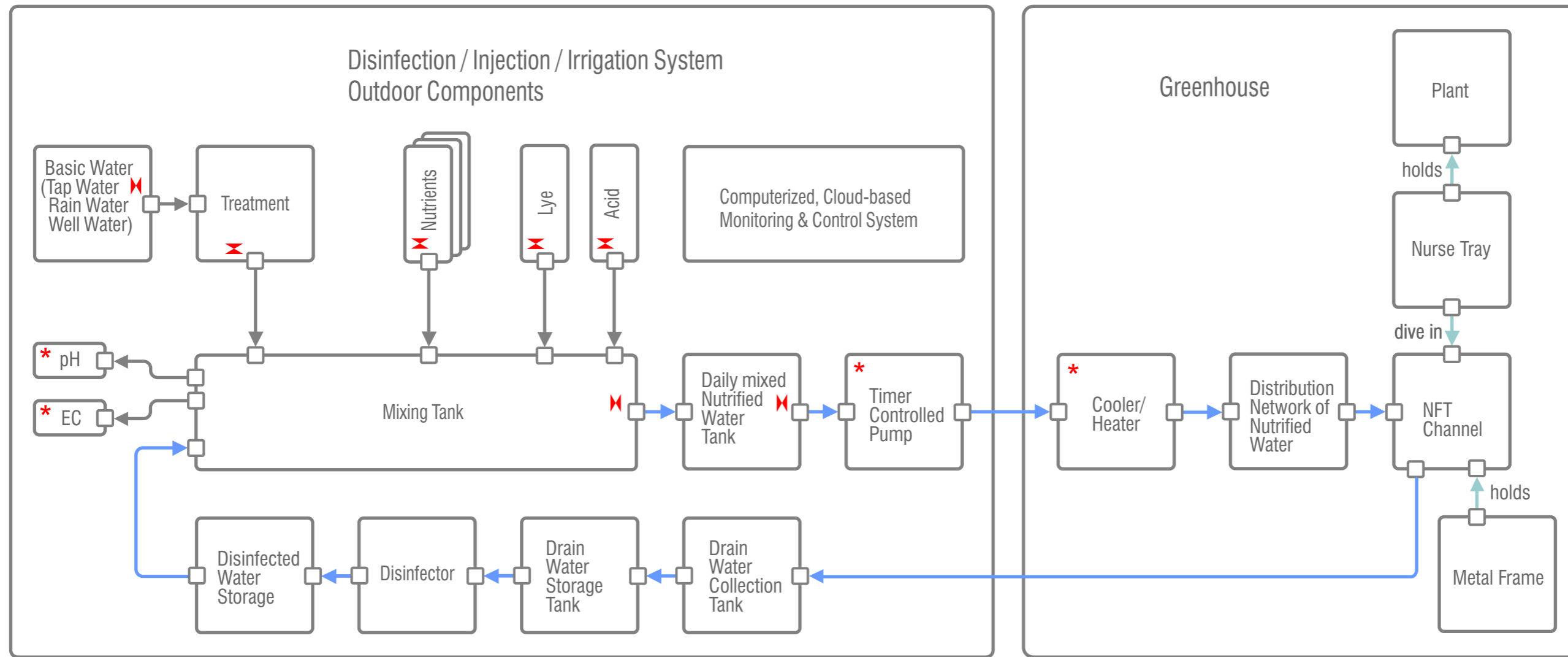


Hydroponics Modelling | Nutrient Film Technique | SysML 1.5 Internal Block Diagram¹⁾



Legend

- Computer-controlled Flow-Control Valve
- Computer-controlled Measured/Set Point
- Nutrient Solution Flow
- Other Material Flow
- Functional Dependency

References

- [1] J. Benton Jones, Jr.: Complete Guide for Growing Plants Hydroponically. CRC Press 2014. ISBN-13: 978-1-4398-7669-5 (eBook - PDF).
- [2] Toyoki Kozai, Genhua Niu, Michiko Takagaki: Plant Factory - An Indoor Vertical Farming System for Efficient Quality Food Production. 2016 Elsevier Inc. ISBN: 978-0-12-801775-3.
- [3] Howard M. Resh: Hydroponic Food Production - A Definitive Guidebook for the Advanced Home Gardener and the Commercial Hydroponic Grower. 7th Edition. CRC Press 2013. ISBN-13: 978-1-4398-7869-9 (eBook - PDF).

¹⁾ The Systems Engineering Model captures operating conditions and functional structures of an NFT-based hydroponic system. The Internal Block Diagram in SysML captures the internal structure of blocks in terms of properties and connectors between properties.