

PM-11 Phytomonitor

Automatic Data logging system with the wide range of optional sensors for plant research and crop growing

Hardware Quick Reference Guide

2007



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Overview

FRONT VIEW

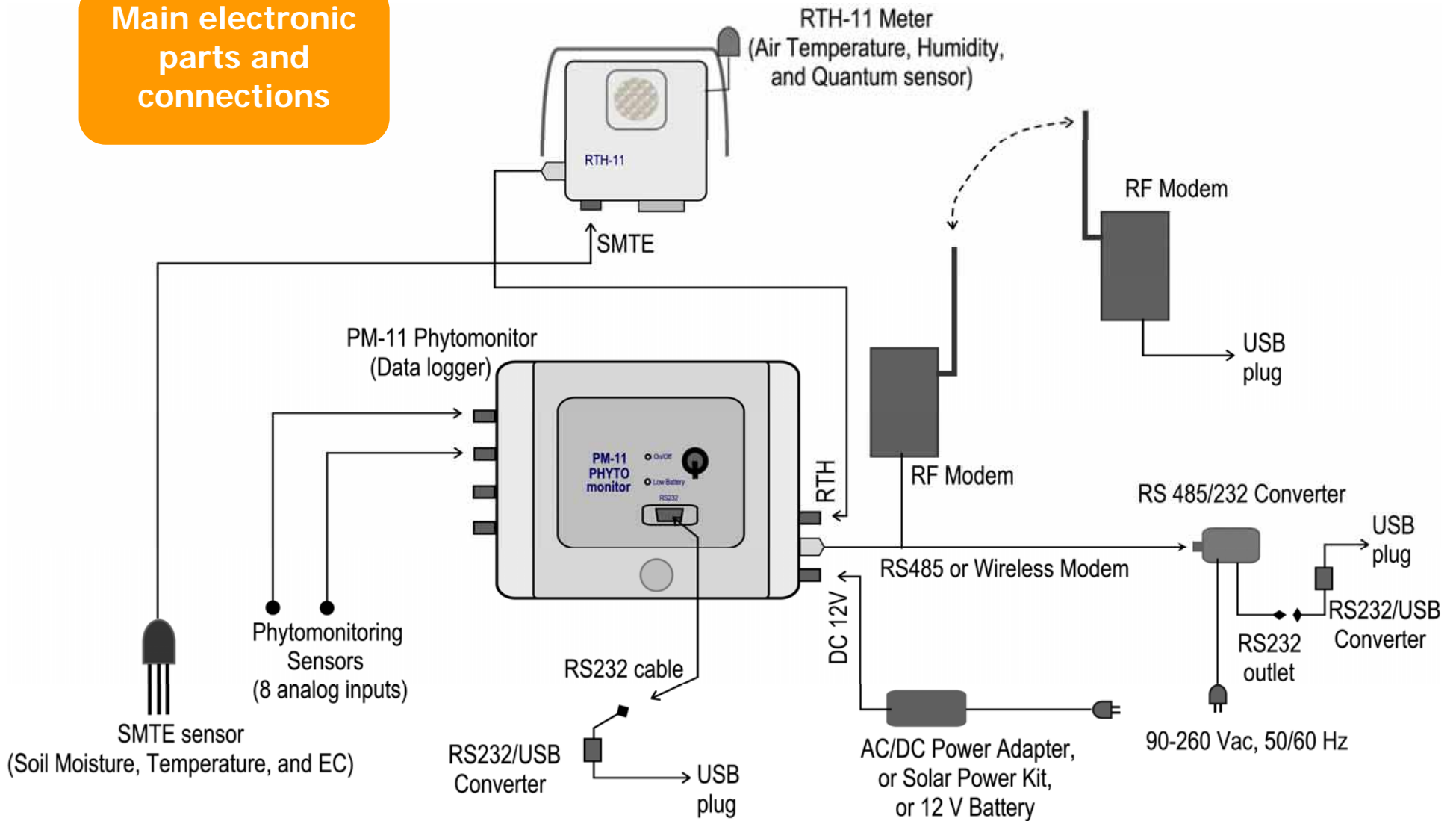
LEFT SIDE VIEW

RIGHT SIDE VIEW



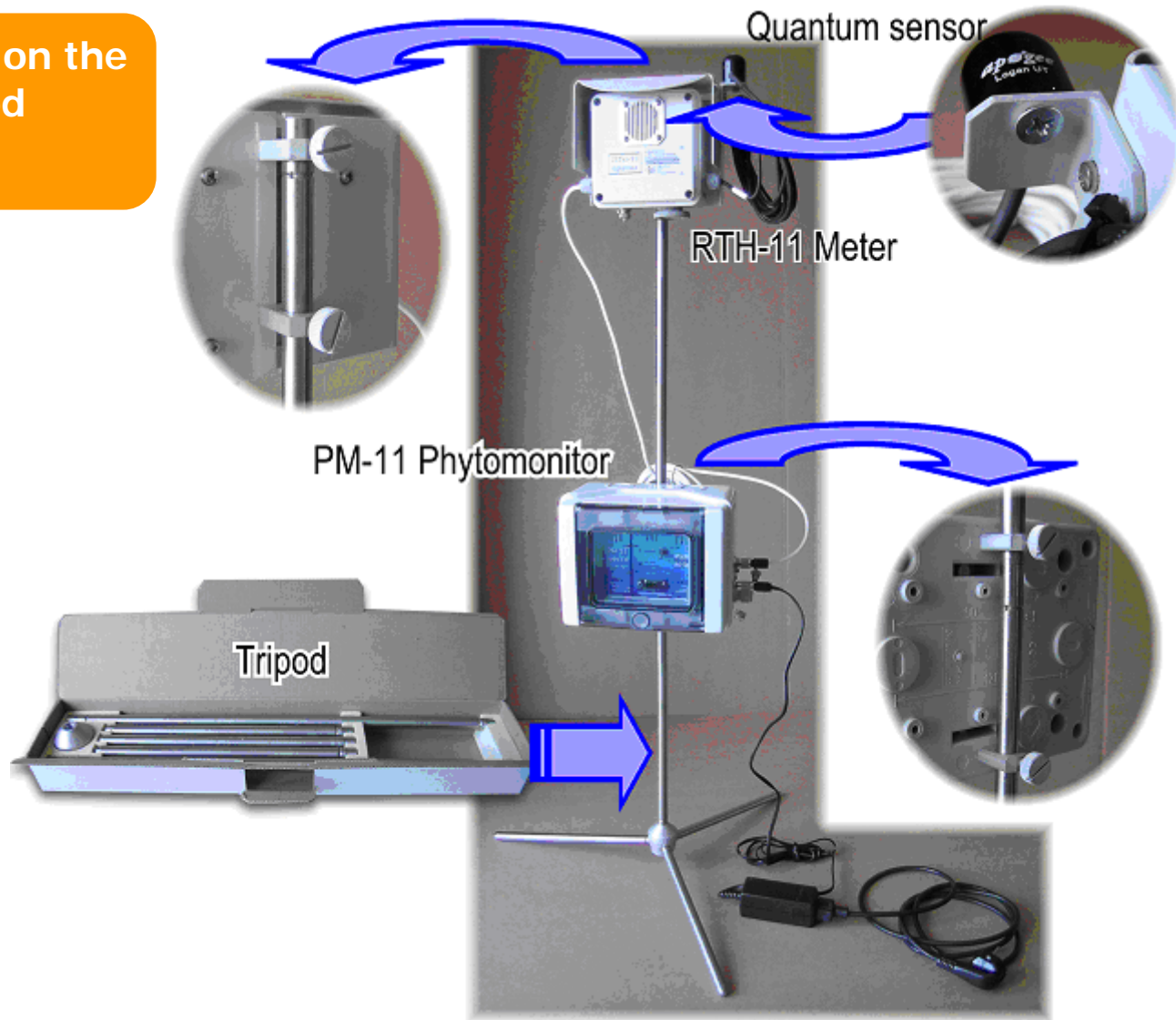
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Main electronic parts and connections



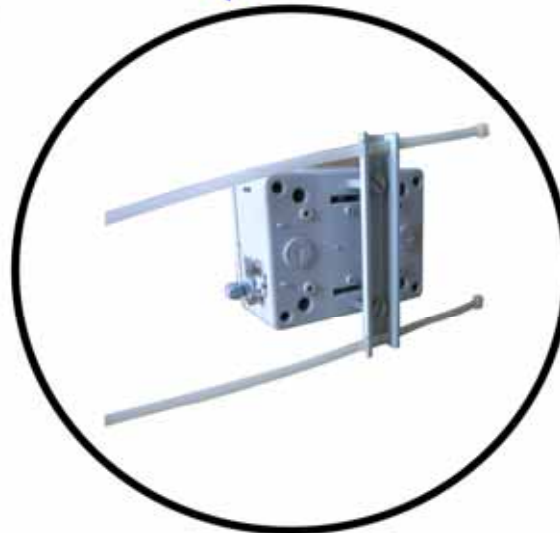
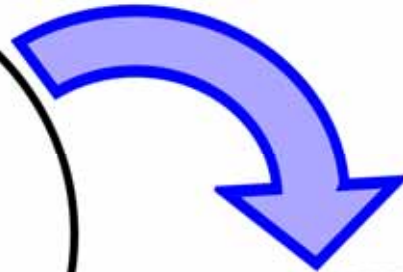
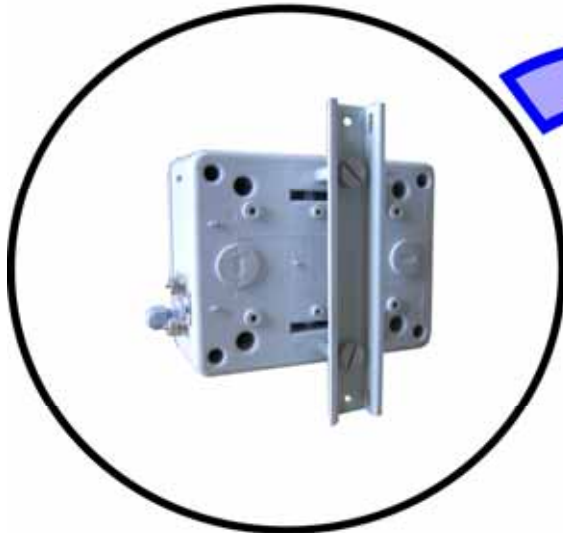
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Mounting on the tripod



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Mounting on
a pole by using
cable ties



Quantum sensor

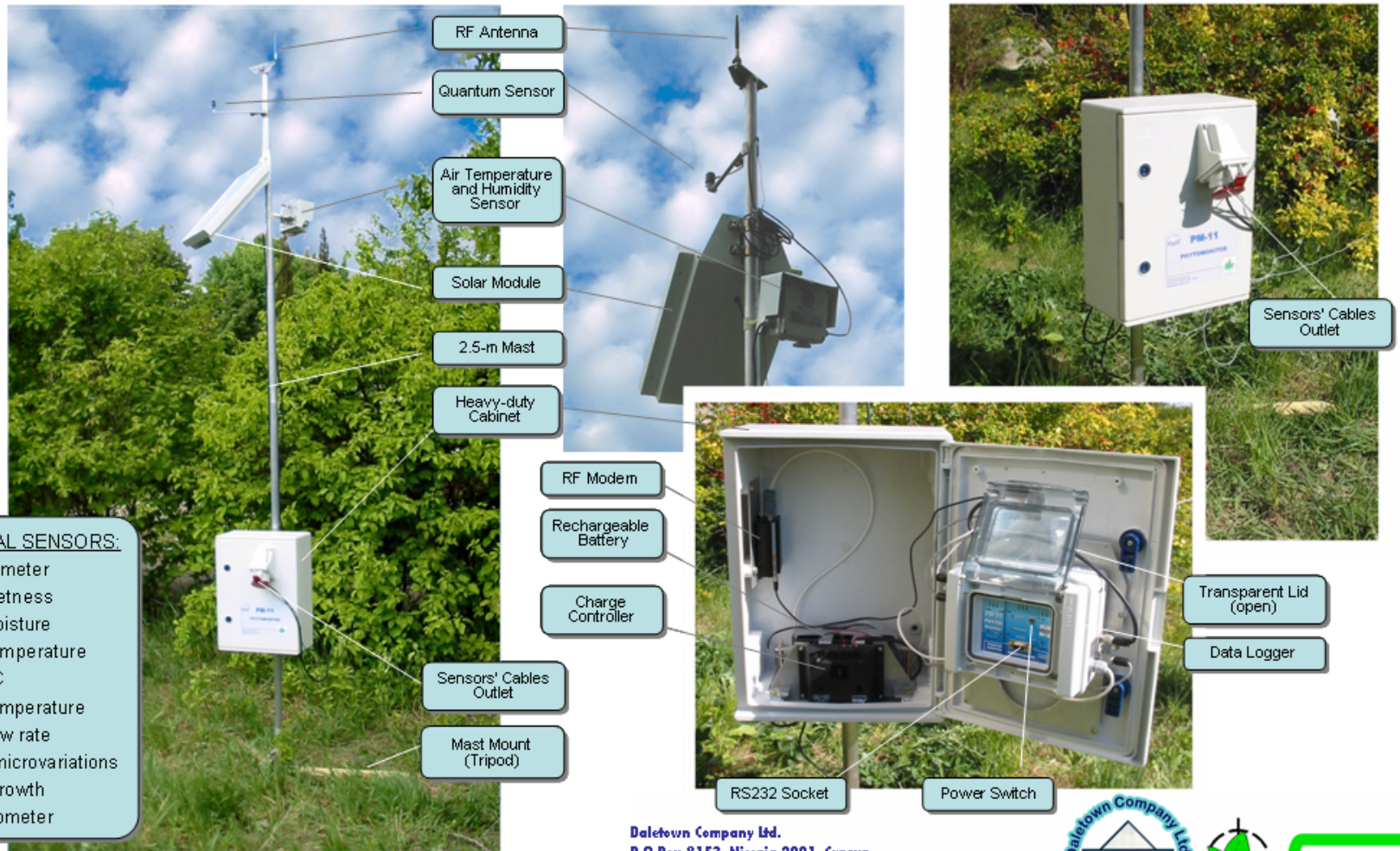


RTH Meter

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Open-field installation



Daletown Company Ltd.
 P.O.Box 8153, Nicosia 2091, Cyprus
 info@daletown-phyto.com



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Modem connections



Unscrew four screws which fix the cover and remove the front cover



RS232 contacts. May be used for connecting optional external modem

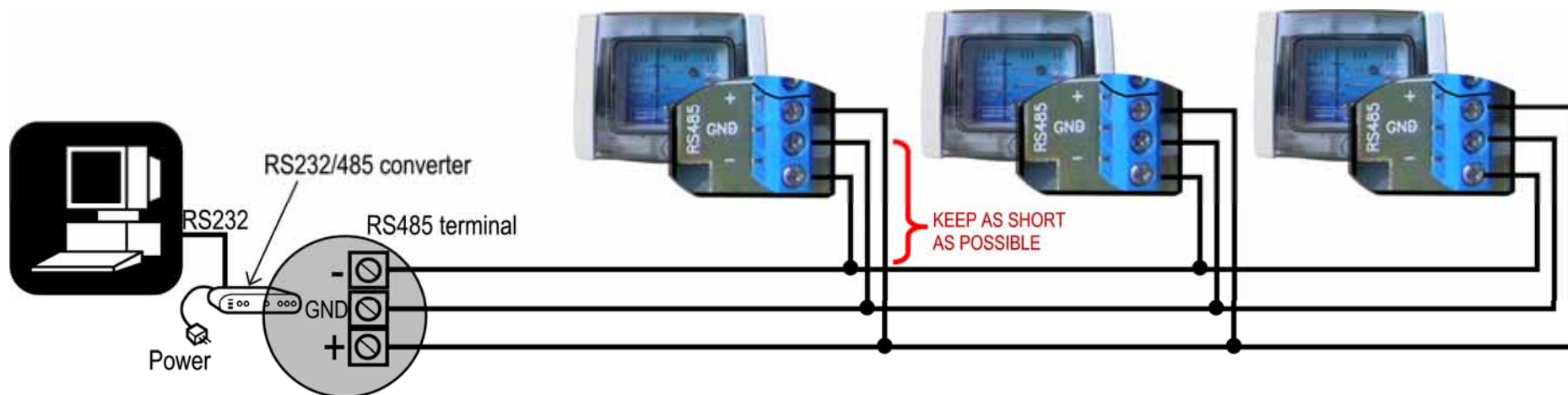
Power for optional RF modem

RS 485 contacts. May be used for connecting RS485 cable or optional external modem

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Wiring of RS485 connection

This is only basic guideline for wiring an RS485 network with several PM-11 Phytomonitors. More detailed information may be found in the appropriate Application note at http://www.maxim-ic.com/apnotes.cfm?apnote_number=763&CMP=WP-1.



A model network with three PM-11 units is shown in the picture above. The wires shall connect all like terminal contacts. The branch cables shall be as short as possible. The end of the main RS485 cable shall be terminated at one of the PM-11 units. Never leave the RS485 cable end unterminated. All devices shall be de-energized while making connections.

Recommended types of cables for RS485 network:

- Twisted pair for '+' and '-' lines. A separate wire for 'GND' (ground)
- Shielded twisted pair. Use a shield for connecting 'GND'.
- A cable with two twisted pairs. Use one pair for connecting 'GND'.