

Ref. No. 1370 (without accessory)

# **Electronic Three-in-One Meter GANN HYDROMETTE HT 85 T**

**Wood Moisture** Structural Moisture **Temperature** 

Triple measuring instrument for wood moisture, structural moisture and temperature, with digital LCD readout and correction facility for four groups of wood and automatic temperature compensation. Designed for precise measurement of wood (up to 180 mm thick), particleboard, veneer and hardened building materials as well as for monitoring kiln drying timber using any desired number of MC, EMC and temperature in-kiln measuring points.

Measuring ranges: 4 to 100 % m.c. with wood.

0 to 80 digits corresponding to 0.5 to 25 % of dry weight with building mate-

rials, conversion by evaluation graphs.

-50 to +199.9 °C for temperature measurements.

#### Principal features and technical data:

- Handy quick moisture meter for fast single and series measurements. Size: L 180 mm × W 115 mm × H 53 mm. Weight: 370 g without accessory.
- Direct reading by digital LCD, resolution: 0.1 % m.c. or 0.1 digits resp.
- Wood species selector for automatic correction of readings, for over 300 species of wood.
- Automatic compensation of influence of wood temperature between −10 and +90 °C.
- Fast measurement of moisture of hardened building materials using the resistance method.
- Precise temperature measurement by Pt 100 probes in 4-conductor technology.
- Fully automatic instrument setting no manual adjustment necessary.
- Power supply by 9 V dry cell or, optionally, Ni-Cd accumulator.

Suitable probes for wood moisture measurement:

M 18. M 20. M 20-OF 15. M 20 HW 200/300 for structural moisture measurement: M 6, M 6-150, M 6-250, M 6-Bi 200/300, M 20, M 20-OF 15, M 20-Bi 200/300, M 21-100/250,

for temperature measurement:

OT 100. OTW 90. ET 10. ET 50. TT 30/40. LT 20. FT 2-FT 30

### **Electrodes for Wood Moisture Measurement**



#### Drive-in electrode M 20

For measurement of timber up to 50 mm thick. Electrode body of impact resistant plastic. Included in the delivery are ten spare pins 16 mm and 23 mm

Ref. No. 3300



#### Modification Set M 20-DS 16

For use of thinner pins (1.6 mm  $\varnothing$ ) for testing timber up to 30 mm thick, consisting of 2 cap nuts (# 3530) and 50 spare pins (# 4600) **Ref. No. 4310** 



# Surface measurement caps M 20-OF 15

For moisture measurements on veneer up to a depth of about 3 mm and surface measurement without damaging the material. Only in conjunction with electrodes M 18 and M 20.

Ref. No. 4315



#### Ram-in electrode M 18

For measurement in depth of timber up to about 180 mm thick. Included in the delivery are ten spare pins 40 mm and 60 mm long.

Ref. No. 3500

Teflon insulated electrode needles for point measurements at different depths available on special order.
45 mm long
Ref. No. 4550
60 mm long
Ref. No. 4500



# Stick-in electrode pins M 20-HW 200/300

Non-insulated pins for use with electrode M 20 for moisture checks on chips, woodwool, veneer piles, etc.

Length 200 mm

Ref. No. 4350

Length 300 mm

Ref. No. 4355





#### Active electrode MH 34

With integrated measuring circuit for measurement of high moisture contents in coniferous wood, specially in case of water-borne storage and for pre-sorting of freshly cut timber for kiln drying.

Measuring range: 40 to 200 % m.c. Ref. No. 3370

# **Active Electrodes for Moisture Measurement in Building Materials**



#### Drive-in electrode M 20

For measurements of soft, set building materials (plaster, gypsum, etc.). The electrode body is of impact resistant plastic, including 10 spare pins 16 mm and 23 mm lona.

Ref. No. 3300



### Surface measuring caps M 20-OF 15

For moisture measurements on surfaces without damaging the material. Effective up to depth of approx. 3 mm. (Only to be used with electrode M 20).

Ref. No. 4315



#### Stick-in electrode M 6

For measurement on hard, set building materials (mortar, concrete, etc.). With ten spare pins 40 mm and 60 mm long (only to be used with contact paste).

Ref. No. 3700



### Flat electrode pair M6-Bi 200/300

For measuring concrete or insulation materials in corner or expansion joints (with insulated shank).

 $10 \times 0.8 \times 200 \text{ mm}$  $10 \times 0.8 \times 300 \text{ mm}$ 

Ref. No. 3702 Ref. No. 3703

200 mm/300 mm

100 mm/250 mm

150 mm/250 mm

of stainless steel, with insulated shaft, for measurements on hard and soft building materials without contact Ref. No. 3740 paste.

Pair of brush electrodes M 25

### Stick-in electrode pins M 20-Bi 200/300

For measurement of materials hidden beneath another panel or covering, with insulated shaft.

200 mm in length Ref. No. 4360 300 mm in length Ref. No. 4365 (only to be used with electrode

M 6 and M 20)

### Deep electrodes M21-100/250 For deep measurements of all kinds of

set building materials in conjunction with contact paste.

100 mm in length Ref. No. 3200 250 mm in length Ref. No. 3250

### Stick-in electrode pins M 6-150/250

Extra thin probes for measuring the moisture content in building and insulating materials over expansion joints or through intersecting tile joints, noninsulated. For use with electrodes M 6 and M 20

 $150 \times 3 \text{ mm } \varnothing$ Ref. No. 3706 Ref. No. 3707  $250 \times 2 \text{ mm } \varnothing$ 



# **Electrodes for Temperature Measurement**

### PT 100 temperature sensors

ET 10	Robust stick-in temperature sensor for solid substances, bulk materials an of probe 100 mm, $\varnothing$ 3 mm, measuring range –50 to 250 °C	d fluids, length <b>Ref. No. 3165</b>
 TT 40	Robust immersion and combustion gas temperature sensor, length of prob $\varnothing$ 5 mm, measuring range –50 to 350 $^{\circ}\text{C}$	e 480 mm, dia. <b>Ref. No. 3180</b>
LT 20	Fast reacting air/gas temperature sensor with probe 480 mm long, dia. $\varnothing$ 5 uring range –20 to 200 $^{\circ}\text{C}$	mm, Meas- <b>Ref. No. 3190</b>
TT 30	Robust immersion and combustion gas temperature sensor, length of prob $\varnothing$ 3 mm, measuring range $-50$ to 350 $^{\circ}\text{C}$	e 230 mm, dia. <b>Ref. No. 3185</b>
ET 50	Fast reacting stick-in temperature sensor for soft solid substances, bulk m Fluids, length of probe 120 mm, dia. $\varnothing$ 3.0/2.3 mm, measuring range –50 t	
OTW 90	Angled special surface temperature sensor for use at veneer presses etc., 100 mm, dia. $\varnothing$ 5 mm, measuring range –50 to 250 °C	length of probe Ref. No. 3175
OT 100	Spring loaded, low mass surface temperature sensor, for use on wall surface Length of probe 110 mm, dia. $\varnothing$ 5 mm, measuring range –50 to 250 °C	ces, etc. <b>Ref. No. 3170</b>
OTW 480	Angled special surface temperature sensor for use at veneer presses etc., 480 mm, dia. $\varnothing$ 5 mm, measuring range –50 to 600 $^{\circ}\text{C}$	length of probe Ref. No. 3176
 TT 480	Robust immersion and combustion gas temperature sensor, length of prob $\varnothing$ 5 mm, measuring range –50 to 600 $^{\circ}\text{C}$	e 480 mm, dia. <b>Ref. No. 3181</b>
TT 600	Robust immersion and combustion gas temperature sensor, length of prob $\varnothing$ 5 mm, measuring range –50 to 600 $^{\circ}\text{C}$	e 600 mm, dia. <b>Ref. No. 3182</b>

## Flexible Pt 100 Temperature Sensors



#### Temperature probe FT

with connection cable and 7-pin plug 5 mm dia. Measuring range: -20 to +120 °C

FT 2 with connection	cable 2 m long	Ref. No. 3195
FT 5 with connection	cable 5 m long	Ref. No. 3196
FT 10 with connection	cable 10 m long	Ref. No. 3197
FT 20 with connection	cable 20 m long	Ref. No. 3198
FT 30 with connection	cable 30 m long	Ref. No. 3199



#### Infra-red Surface Temperature Sensor IR 40

Contactless temperature measurement from –20 to +199.9 °C, resolution to 0.1 °C, emission degree 95 %, ratio of measured area to distance 2.5 : 1 (diameter 45 mm at a distance of 100 mm), sensor length 185 mm, diameter 32 mm, coiled cable 400/1400 mm.

An ideal sensor for detection of heat bridges, determination of the dew point temperature, measurement of live, moving or vibrating components as well as measurement of components with low heat capacity, e.g. wood, glass, insulating materials, etc., as well as for finding heating coils.

Ref. No. 3150