



Clocks for indoor and outdoor use

## METROLINE

The attractive range of clocks in aluminum lightweight housing for versatile applications such as impulse slave clocks, quartz clocks as well as self-setting radio, MOBALine, IRIG-B/AFNOR or NTP clocks.

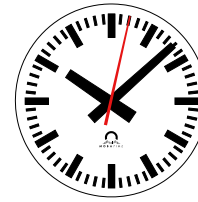
Modern technology guarantees reliable operation and high precision. Available as single-sided and double-sided clocks.

The double-sided METROLINE clocks are equipped with a rotatable carrier in the middle which allows various mounting options by simple 90° rotation of the clocks, e.g. for wall, ceiling, socket or post mounting.

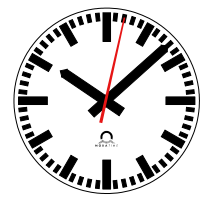
The standard degree of protection is IP 54, with an option for IP 65.

## METROLINE - Order information

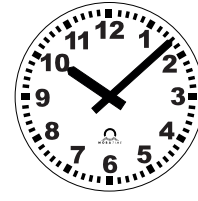
Type	Time code variants										Dial type ZB xxx			Mounting							
Clock type	Diameter	Minute impulses	Min. impulses with second	NTP (PoE or 230 VAC)	MOBALine	Radio DCF (battery) (h/m)	Radio DCF, MSF, GPS (230 VAC)	Quartz movement (battery) (h/m)	Serial protocol RS 485	Audio frequency time code IRIG-B	Dial type 120	Dial type 300	Dial type 315	Wall mounting (single-sided)	Wall bracket (WA)	Ceiling suspension (DA)	Ceiling suspension 500 mm	Ceiling suspension 600 mm	Ceiling suspension 800 mm	Central pole (ZM)	Socket mounting (S)
ML	50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
ML	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓
ML	80	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓



ZB 120



ZB 300



ZB 315

### Ordering code

Type	Illumination	Ø	Version	Time code variants	Dial	Cover glass	Mounting type
ML	0 = none 2 = LED	50 60 80	R1 = round single-sided R2 = round double-sided	Ordering code for movement, see below	120 300 315	1 = HPT METROLINE	00 = Wall mounting 10 = Wall bracket (WA) 20 = Ceiling suspension (DA) 21 = Ceiling suspension 500 22 = Ceiling suspension 600 23 = Ceiling suspension 800 30 = Central pole mounting (ZM) 50 = Socket mounting (S)

METROLINE clocks can be delivered with any RAL color (option with additional cost) e.g. ML0.60.R2.M04.300.1.10.RAL9005

## METROLINE - Time code variants

### Polarized impulses: lxx

Time code	Ø	Voltage, Pwr. supply	Hands	Code
Min. impulse	50 - 80	24 - 60 V	h/m	I02
Min. impulse	50 - 80	24 - 60 V, 230 VAC / 50 Hz	h/m/s	I06
Min. impulse	50 - 80	12 - 60 VDC, 45 - 265 VAC /50-60 Hz	h/m/s	I21

### MOBALine self-setting: Mxx / Cxx

Time code	Ø	Power supply	Hands	Code
MOBALine	50 - 80	MOBALine	h/m	M16
MOBALine	50 - 80	230 VAC / 50-60 Hz	h/m	C01
MOBALine	50 - 80	MOBALine	h/m/s	M18
MOBALine	50 - 80	230 VAC / 50-60 Hz	h/m/s	M12
MOBALine	50 - 80	PoE / PoE+	h/m	C09

### NTP (LAN) self-setting: Nxx

Time code	Ø	Power supply	Hands	Code
NTP	50 - 80	PoE	h/m	N11
NTP	50 - 80	PoE	h/m/s	N13
NTP	50 - 80	230 VAC / 50-60 Hz	h/m	N01
NTP	50 - 80	230 VAC / 50-60 Hz	h/m/s	N03

### Quartz: Qxx

Time code	Ø	Power supply	Hands	Code
Quartz, single-sided	50 - 80	Lithium battery	h/m	Q02
Quartz, double-sided	50 - 80	Lithium battery	h/m	Q03

### Serial: Sxx

Time code	Ø	Power supply	Hands	Code
Serial	50 - 80	230 VAC / 50-60 Hz or DC	h/m	S01
Serial	50 - 80	230 VAC / 50-60 Hz or DC	h/m/s	S03

### IRIG / AFNOR: Txx

Time code	Ø	Power supply	Hands	Code
IRIG / AFNOR or DCF-FSK	50 - 80	230 VAC / 50-60 Hz	h/m	T51
IRIG / AFNOR or DCF-FSK	50 - 80	230 VAC / 50-60 Hz	h/m/s	T53

### DCF 77 / MSF: Rxx

Time code	Ø	Power supply	Hands	Code
DCF 77 (int. antenna)	50 - 80	Lithium battery	h/m	R26/R29
DCF 77 (ext. antenna)	50 - 80	Lithium battery	h/m	R31
DCF 77	50 - 80	230 VAC / 50-60 Hz	h/m	R01
DCF 77	50 - 80	230 VAC / 50-60 Hz	h/m/s	R04

### GPS: Rxx (with mouse antenna)

Time code	Ø	Power supply	Hands	Code
GPS, single-sided	50 - 80	Lithium battery	h/m	R51
GPS, double-sided	50 - 80	Lithium battery	h/m	R54

For special movement / time code variants see document TE-800800 (available on [www.mobatime.com](http://www.mobatime.com), in the customer area).

## Ordering number - METROLINE

ML 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8

Illumination			1
None			0
LED			2
Diameter			2
Ø 50 cm			50
Ø 60 cm			60
Ø 80 cm			80
Version			3
Round, single-sided			R1
Round, double-sided			R2
Movement type	Time code / Power supply	Hands	4
Minute impulse movement NU 90t	24, 48 or 60 V polarized impulses	h / m	I02
Minute impulse movement NU 90t SYN	24, 48 or 60 V polarized impulses / 230 VAC, 50 Hz	h / m / s	I06
Minute impulse movement IBU 190t S <sup>1</sup>	12 - 60 V polarized impulses / 45-265 VAC, 50-60 Hz	h / m / s	I21
Radio movement FU 192t, auton., self-setting, w/o illumin. <sup>13</sup>	internal DCF 77 radio receiver, lithium battery <sup>14</sup>	h / m	R26/29
Radio movement BU 192t, auton., self-setting, w/ illumin. <sup>13</sup>	external DCF 77 radio receiver, lithium battery <sup>14</sup>	h / m	R31
Radio movement BU 190t, autonomous, self-setting	external DCF 77 radio receiver DCF 4500 <sup>14</sup> 230 VAC, 50-60 Hz	h / m	R01
Radio movement BU 190t S 230, autonomous, self-setting <sup>1</sup>	external DCF 77 radio receiver DCF 4500 <sup>14</sup> 230 VAC, 50-60 Hz	h / m / s	R04
DCF active/MOBALine movement SAM 100t, self-setting	MOBALine	h / m	M16
DCF active/MOBALine movement SAM 100t + DCC, self-setting	MOBALine / 230 VAC, 50-60 Hz	h / m	C01
DCF active/MOBALine movement SEM 100t, self-setting <sup>1</sup>	MOBALine	h / m / s	M18
DCF active/MOBALine movement MLU 190t S 230 self-setting <sup>1</sup>	MOBALine / 230 VAC, 50-60 Hz	h / m / s	M12
Time code movement SU 190t 230, supervised	serial protocol via RS 485 / 230 VAC, 50-60 Hz or DC	h / m	S01
Time code movement SU 190t S 230, supervised <sup>1</sup>	serial protocol via RS 485 / 230 VAC, 50-60 Hz or DC	h / m / s	S03
Audio frequency movement ATBU 190t 230, self-setting	IRIG-B, AFNOR or DCF-FSK / 230 VAC, 50-60 Hz	h / m	T51
Audio frequency movement ITBU 190t S 230, self-setting <sup>1</sup>	IRIG-B, AFNOR or DCF-FSK / 230 VAC, 50-60 Hz	h / m / s	T53
NTP movement NBU 190t PoE, self-setting	NTP / PoE <sup>12</sup>	h / m	N11
NTP movement NBU 190t S PoE, self-setting <sup>1</sup>	NTP / PoE <sup>12</sup>	h / m / s	N13
NTP movement NBU 190t 24 + PS24, self-setting	NTP / 230 VAC, 50-60 Hz	h / m	N01
NTP movement NBU 190t S 24 + PS24, self-setting	NTP / 230 VAC	h / m / s	N03
DCF active/MOBALine movement SAM 100t + NCC, self-setting	NTP / PoE or PoE+ <sup>12</sup>	h / m	C09
Quartz movement QU 192t, autonomous <sup>13</sup>	Lithium battery <sup>14</sup>	h / m	Q02/03
GPS movement GU 192t, autonomous, self-setting <sup>13</sup>	GPS controlled via mini antenna / lithium battery <sup>14</sup>	h / m	R51/54
Dial type			5
Dial with line marks type 120			120
Dial with line marks type 300			300
Dial type 315 with arabic numerals			315
Cover glass			6
HPT METROLINE			1
Mounting			7
Wall mounting	single-sided		00
Wall bracket (WA)	double-sided		10
Ceiling mounting (DA)	double-sided		20
Ceiling suspension 500 mm (DA500)	double-sided		21
Ceiling suspension 600 mm (DA 600)	double-sided		22
Ceiling suspension 800 mm (DA 800)	double-sided		23
Central post (ZM)	double-sided		30
Socket mounting (S)	double-sided		50
Sequence number			8
Special RAL color, dials, hands, logos etc. (standard version = 0000)			xxxx

<sup>1</sup> Second hand continuous or stepwise

<sup>12</sup> PoE (Power over Ethernet) switch or PoE injector not included. PoE must be provided by the customer.

<sup>13</sup> see movements series 192 <sup>14</sup> not included

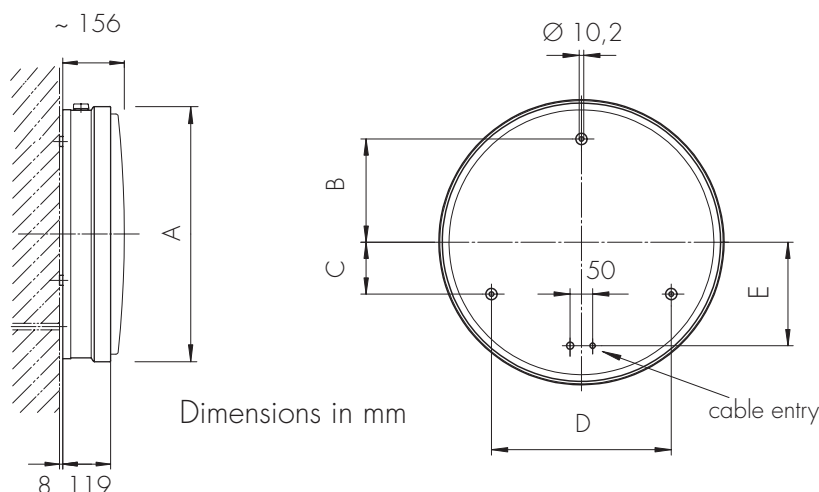
**Order example:** MLO.60.R1.M12.300.1.00.0000

(METROLINE clock without illumination, Ø 60 cm, single-sided, MOBALine movement for h/m, dial type 300, HPT glass, wall mounting)

## METROLINE - Single-sided slave clocks

Round, single-sided, nominal diameter 50, 60 and 80 cm. With or without LED illumination. Light-weight metal housing, color RAL 9006, "white aluminum" powder

coated. Convex acrylic protection glass. White dial with black printing. Simple 3 point fixation with case backside.

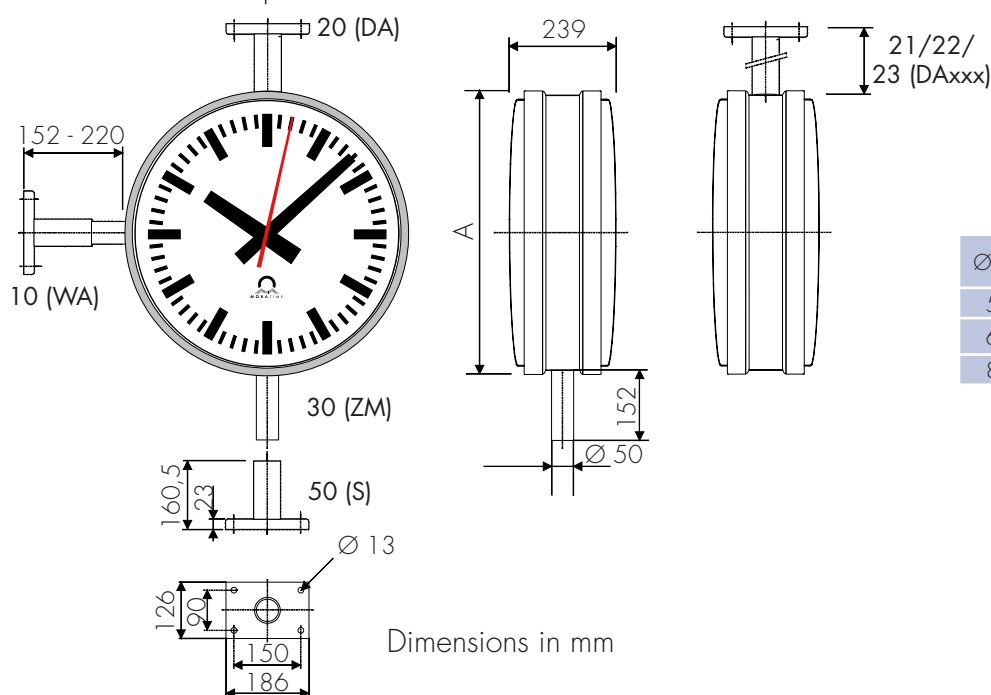


Ø cm	A/B/C/D/E mm	weight kg
50	534 / 190 / 95 / 330 / 190	6.8
60	634 / 230 / 115 / 400 / 230	8.0
80	834 / 300 / 150 / 520 / 300	11.0

## METROLINE - Double-sided slave clocks

Round, double-sided, nominal diameter 50, 60 and 80 cm. With or without LED illumination. Light-weight metal housing, color RAL 9006, "white aluminum" powder-coated.

Convex acrylic protection glass. White dial with black printing. Option: Long suspension rod "DAxxx".



Ø cm	A mm	weight kg
50	534	12
60	634	14
80	834	18