

# Supplement for reference manual 705184G

METTLER TOLEDO  
MT-SICS 0 version 2.2x  
MT-SICS 1 version 2.2x  
MT-SICS 2 R Standard version 2.3x  
MT-SICS 3 R Standard version 2.2x

**METTLER TOLEDO**



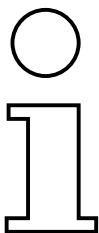
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## 1. General



All new METTLER TOLEDO balances support the standard command set "METTLER TOLEDO Standard Interface Command Set", which is divided into 4 levels depending on the functionality of the balance.

This supplement shows you what commands of the METTLER TOLEDO Standard Interface Command Set (MT-SICS) are implemented with your balance.

### **MT-SICS version numbers**

You can request the version numbers of the implemented MT-SICS command set with all balances using the command I1.

You can request all implemented MT-SICS commands using the command IO.

## 2. Overview of all balances and commands

### MT-SICS level 0

Function	Software Version Command	AB < 2.01	AB ≥ 2.01	AB-S ≥ 1.00	AG < 1.20	AG ≥ 1.20	PB < 2.01	PB ≥ 2.01	PB-S ≥ 1.00	AB-S/E ≥ 1.00 PB-S/E
Inquiry of all implemented MT-SICS commands	I0	-	X	X	-	X	-	X	X	X
Inquiry of MT-SICS level and MT-SICS versions	I1	X	X	X	X	X	X	X	X	X
Inquiry of balance data	I2	X	X	X	X	X	X	X	X	X
Inquiry of balance SW version and type definition number	I3	X	X	X	X	X	X	X	X	X
Inquiry of serial number	I4	X	X	X	X	X	X	X	X	X
Send stable weight value	S	X	X	X	X	X	X	X	X	X
Send weight value immediately	SI	X	X	X	X	X	X	X	X	X
Send weight value immediately and repeat	SIR	X	X	X	X	X	X	X	X	X
Tare	T	X	-	-	X	-	X	-	-	-
Zero	Z	X	X	X	X	X	X	X	X	X
Zero immediately	ZI	-	X	X	-	X	-	X	X	X
Reset	@	X	X	X	X	X	X	X	X	X

### MT-SICS level 1

Function	Software Version Command	AB < 2.01	AB ≥ 2.01	AB-S ≥ 1.00	AG < 1.20	AG ≥ 1.20	PB < 2.01	PB ≥ 2.01	PB-S ≥ 1.00	AB-S/E ≥ 1.00 PB-S/E
Balance display	D	X	X	X	X	X	X	X	X	X
Weight display (Display show Weight)	DW	X	X	X	X	X	X	X	X	X
Key control	K	X	X	X	X	X	X	X	X	X
Send weight value on weight change (Send and Repeat)	SR	X	X	X	X	X	X	X	X	X
Tare	T	-	X	X	-	X	-	X	-	X
Inquiry/setting of tare value	TA	X	X	X	X	X	X	X	-	X
Clear tare value	TAC	X	X	X	X	X	X	X	-	X
Tare Immediately	TI	X	X	X	X	X	X	X	-	X

## 2. Overview of all balances and commands

### MT-SICS level 0

Function	Software Version Command	PG	PG-S < 1.20	PG-S ≥ 1.20	PR < 1.60 SR	PR ≥ 1.60 SR	SB < 2.01	SB ≥ 2.01	SG
Inquiry of all implemented MT-SICS commands	I0	-	-	X	X	X	-	X	-
Inquiry of MT-SICS level and MT-SICS versions	I1	X	X	X	X	X	X	X	X
Inquiry of balance data	I2	X	X	X	X	X	X	X	X
Inquiry of balance SW version and type definition number	I3	X	X	X	X	X	X	X	X
Inquiry of serial number	I4	X	X	X	X	X	X	X	X
Send stable weight value	S	X	X	X	X	X	X	X	X
Send weight value immediately	SI	X	X	X	X	X	X	X	X
Send weight value immediately and repeat	SIR	X	X	X	X	X	X	X	X
Tare	T	X	-	-	-	-	X	-	X
Zero	Z	X	X	X	X	X	X	X	X
Zero immediately	ZI	-	-	X	X	X	-	X	-
Reset	@	X	X	X	X	X	X	X	X

### MT-SICS level 1

Function	Software Version Command	PG	PG-S < 1.20	PG-S ≥ 1.20	PR < 1.60 SR	PR ≥ 1.60 SR	SB < 2.01	SB ≥ 2.01	SG
Balance display	D	X	X	X	X	X	X	X	X
Weight display (Display show Weight)	DW	X	X	X	X	X	X	X	X
Key control	K	X	X	X	X	X	X	X	X
Send weight value on weight change (Send and Repeat)	SR	X	X	X	X	X	X	X	X
Tare	T	-	X	X	X	X	-	X	-
Inquiry/setting of tare value	TA	X	X	X	X	X	X	X	X
Clear tare value	TAC	X	X	X	X	X	X	X	X
Tare Immediately	TI	X	X	X	X	X	X	X	X

## MT-SICS level 2 R-Standard

Function	Software Version Command	AB < 2.01	AB ≥ 2.01	AB-S ≥ 1.00	AG < 1.20	AG ≥ 1.20	PB < 2.01	PB ≥ 2.01	PB-S ≥ 1.00	AB-S/E ≥ 1.00 PB-S/E
Inquiry/setting of calibration setting <sup>1)</sup>	C0	-	X	-	X	X	-	X	-	-
Initiate calibration according to current setting	C1	-	X	-	X	X	-	X	-	-
Initiate calibration with external weight	C2	-	X	-	-	X	-	X	-	-
Initiate calibration with internal weight	C3	-	-	-	-	X	-	-	-	-
Date	DAT	-	-	-	-	-	-	-	-	-
Balance ID	I10	-	-	-	-	-	-	-	-	-
Balance type	I11	X	X	X	X	X	X	X	X	X
Menu setting	M	X	X	-	X	X	X	X	-	-
Setting of the weighing parameters <sup>1)</sup>	MW	X	X	-	X	X	X	X	-	-
Power on / off	PWR	X	X	X	X	X	X	X	-	-
Print out text on the strip printer	P100	X	X	-	X	X	X	X	-	-
Send stable weight to printer channel	P101	X	X	-	X	X	X	X	-	-
Send weight to printer channel immediately	P102	X	X	-	X	X	X	X	-	-
Bottom line of display	P110 P111	-	-	-	-	-	-	-	-	-
Reset DeltaTrac according to application	P120	-	-	-	-	X	-	-	-	-
Set DeltaTrac as +/- display	P121	-	-	-	-	X	-	-	-	-
Activate individual pointers of DeltaTrac	P122	-	-	-	-	-	-	-	-	-
Activate DeltaTrac by segments	P123	-	-	-	-	-	-	-	-	-
Switch off DeltaTrac	P124	-	-	-	-	X	-	-	-	-
Send next and repeat	SNR	X	X	-	X	X	X	X	-	-
Send stable weight value with currently displayed unit and repeat after each deflection	SNRU	X	X	-	X	X	X	X	-	-
Send stable weight value after pressing $\Rightarrow$ key	ST	X	X	X	X	X	X	X	X	X
Send stable weight with current unit	SU	X	X	-	X	X	X	X	-	-
Send weight with current unit immediately	SIU	X	X	-	X	X	X	X	-	-
Send weight with currently displayed unit immediately and repeat	SIRU	X	X	-	X	X	X	X	-	-
Send stable weight with current unit after deflection	SRU	X	X	-	X	X	X	X	-	-
Time	TIM	-	-	-	-	-	-	-	-	-
Inquiry/setting of the test function <sup>1)</sup>	TST0	-	X	-	X	X	-	X	-	-
Initiate test function in the current setting	TST1	-	X	-	X	X	-	X	-	-
Initiate test function with external weight	TST2	-	X	-	-	X	-	X	-	-
Initiate test function with internal weight	TST3	-	-	-	-	X	-	-	-	-
Inquiry/setting of update rate (data output rate)	UPD	-	-	-	-	-	-	-	-	-

<sup>1)</sup> With AB/PB/SB and AG/PG/PG-S/SG balances, only those parameters which are available in the menu can be set, see special cases.

## MT-SICS level 2 R-Standard

Function	Software Version Command	PG	PG-S < 1.20	PG-S ≥ 1.20	PR < 1.60 SR	PR ≥ 1.60 SR	SB < 2.01	SB ≥ 2.01	SG
Inquiry/setting of calibration setting <sup>1)</sup>	C0	X	X	X	X	X	-	X	X
Initiate calibration according to current setting	C1	X	X	X	X	X	-	X	X
Initiate calibration with external weight	C2	-	X	X	X	X	-	X	-
Initiate calibration with internal weight	C3	-	X	X	X	X	-	-	-
Date	DAT	-	-	-	X	X	-	-	-
Balance ID	I10	-	-	-	X	X	-	-	-
Balance type	I11	X	X	X	X	X	X	X	X
Menu setting	M	X	X	X	X	X	X	X	X
Setting of the weighing parameters <sup>1)</sup>	MW	X	X	X	X	X	X	X	X
Power on / off	PWR	X	X	X	X	X	X	X	X
Print out text on the strip printer	P100	X	X	X	X	X	X	X	X
Send stable weight to printer channel	P101	X	X	X	X	X	X	X	X
Send weight to printer channel immediately	P102	X	X	X	X	X	X	X	X
Bottom line of display	P110 P111	- -	- -	- -	X X	X X	- -	- -	- -
Reset DeltaTrac according to application	P120	-	-	X	X	X	-	-	-
Set DeltaTrac as +/- display	P121	-	-	X	X	X	-	-	-
Activate individual pointers of DeltaTrac	P122	-	-	X	X	X	-	-	-
Activate DeltaTrac by segments	P123	-	-	X	X	X	-	-	-
Switch off DeltaTrac	P124	-	-	X	X	X	-	-	-
Send next and repeat	SNR	X	X	X	X	X	X	X	X
Send stable weight value with currently displayed unit and repeat after each deflection	SNRU	X	X	X	X	X	X	X	-
Send stable weight value after pressing $\square \rightarrow$ key	ST	X	X	X	X	X	X	X	X
Send stable weight with current unit	SU	X	X	X	X	X	X	X	X
Send weight with current unit immediately	SIU	X	X	X	X	X	X	X	X
Send weight with currently displayed unit immediately and repeat	SIRU	X	X	X	X	X	X	X	X
Send stable weight with current unit after deflection	SRU	X	X	X	X	X	X	X	X
Time	TIM	-	-	-	X	X	-	-	-
Inquiry/setting of the test function <sup>1)</sup>	TST0	X	X	X	X	X	-	X	X
Initiate test function in the current setting	TST1	X	X	X	X	X	-	X	X
Initiate test function with external weight	TST2	-	-	X	X	X	-	X	-
Initiate test function with internal weight	TST3	-	-	X	X	X	-	-	-
Inquiry/setting of update rate (data output rate)	UPD	-	-	-	-	X	-	-	-

<sup>1)</sup> With AB/PB/SB and AG/PG/PG-S/SG balances, only those parameters which are available in the menu can be set, see special cases.

## MT-SICS level 3 R-Standard

Function	Software Version Command	AB < 2.01	AB ≥ 2.01	AB-S ≥ 1.00	AG < 1.20	AG ≥ 1.20	PB < 2.01	PB ≥ 2.01	PB-S ≥ 1.00	AB-S/E ≥ 1.00 PB-S/E
Inquiry/setting of lot identification	I12	-	-	-	-	-	-	-	-	-
Inquiry/setting of sample identification	I13	-	-	-	-	-	-	-	-	-
Inquiry/setting of piece weight	PW	-	-	-	-	-	-	-	-	-
Cancel commands SM2 and SM3	SM0	x	x	-	-	x	x	x	-	-
Start dynamic weighing immediately and transfer a result	SM1	x	x	-	-	x	x	x	-	-
Start dynamic weighing and transfer a result	SM2	x	x	-	x	x	x	x	-	-
Start dynamic weighing, transfer result and repeat	SM3	x	x	-	x	x	x	x	-	-
Inquiry/setting of the weighing time of the dynamic weighing	SM4	-	-	-	-	-	-	-	-	-

## MT-SICS level 3 R-Standard

Function	Software Version Command	PG	PG-S < 1.20	PG-S ≥ 1.20	PR < 1.60 SR	PR ≥ 1.60 SR	SB < 2.01	SB ≥ 2.01	SG
Inquiry/setting of lot identification	I12	-	-	-	x	x	-	-	-
Inquiry/setting of sample identification	I13	-	-	-	x	x	-	-	-
Inquiry/setting of piece weight	PW	-	-	-	x	x	-	-	-
Cancel commands SM2 and SM3	SM0	x	-	x	x	x	x	x	x
Start dynamic weighing immediately and transfer a result	SM1	x	-	x	x	x	x	x	x
Start dynamic weighing and transfer a result	SM2	x	-	x	x	x	x	x	x
Start dynamic weighing, transfer result and repeat	SM3	x	-	x	x	x	x	x	x
Inquiry/setting of the weighing time of the dynamic weighing	SM4	-	-	-	x	x	-	-	-

## Special cases

With AB/PB/SB and AG/PG/PG-S/SG balances, only those parameters which are available in the menu can be changed, see the respective operating instructions. All other parameters have a fixed, unalterable value.

To enable the parameters to be set, a value between 0 and 255 must be entered for the fixed parameters.

### AB/PB/SB balances

#### Fixed parameters with command "MW..."

x2	Weighing process adapter, depending on x1
x3 = 2	ReproSet = Good
x5 = 1	AutoZero = on
x6 = 0	1d readability, max. accuracy
x8 = 0	no PreTare function
x9 = 0	Custom Unit inactive
x10 = 0	0 decimal places of Custom Unit
x11 = 1.0	Factor of Custom Unit
x12 = 0	Name of Custom Unit
x13 = 0	Menu language (English)

### AG/PG/PG-S/SG balances

#### Fixed parameters with command "MW..."

x8 = 0	no PreTare function
x9 = 0	Custom Unit inactive
x10 = 0	0 decimal places of Custom Unit
x11 = 1.0	Factor of Custom Unit
x12 = 0	Name of Custom Unit
x13 = 0	Menu language (English)

#### Fixed parameters with command "TSTO..."

"WeightValue Unit" = "" Response without value as the test weight is not known.