Film Thickness Monitor
DX7000 Plus Series

Features & Advantages

- ✓ **Non-contact and not-distractive measurements**
- ✓ **High sensitivity and accuracy**
- ✓ **Fast response**
- ✓ **Compact design and light weight**
- ✓ **Low power consumption**
- ✓ **Versatility**
- ✓ **No moving parts**

Applications

- ✓ **Industrial quality control**
- ✓ **Process automation in plastic film production**
- ✓ **Laboratory thickness measurements**

The com an RMT in od ce ne DX7000Pl Se ie of en o fo film hickne mea emen .

Se e al ba ic ion' o ide acc a e mea emen of Pol e h lene, Pol' lene and imila film and elecvi e mea emen of a a e la e in m l ila e film c e , fo in ance ba ie la e (EVOH o imila ma e ial).

Mea emen conce i ba ed on non-di' e vi e inf a ed' ec o co elecvi e IR ab' ion b molec le of e amined ma e ial. The ical ab' ion' incl le o ide non-con ac and non-de cvi e a' lica ion ad an age of DX7000Pl en o .

The DX7000Pl ical Sen o i ' eciall de igned fo fa e' on e, high en ivi i , lo noi e and lo ' o e con m ion.

High acc ac and fa e' on e fea e make he en o ef l in a ide ange of ind ial a oma ion,' oce con ol and labo a o a' lica ion .

A' lica ion ec o a e: ca film , blo n film , coa ing and lamina ing, e ion coa ing and o he .

A n mbe of de ign fea e con ib e o he de ice' e fo mance.

The diffe en ial do ble f e , enc ical cheme' o ide a high acc ac in ide ange of h midi and em e a e d e o he in e nal he mo abiliza ion.

Ne ' e of middle inf a ed ligh emi e and ' ho ode ec o i h b il -in he moelec ic cooling a e ed. No mo ing' a .

The main' a of he Sen o (Ligh emi e and Pho ode ec o mod le) a e connec ed ia he RS-485 in e face i h ' o 10 me e long cable.

The high da a a e and noi e imm ni of he in e face a ell a a e mall e' on e ime allo ing he en o on a canning f ame o in a fi ed' oin .

229- 12, 200 28015
390-321-928-270-80 390-321-926-850

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Design

T eDX7000 P Se
c t ee t:
- DX7010P Detect e
- DX7011P E tte e
- DX7012P C ect
e.

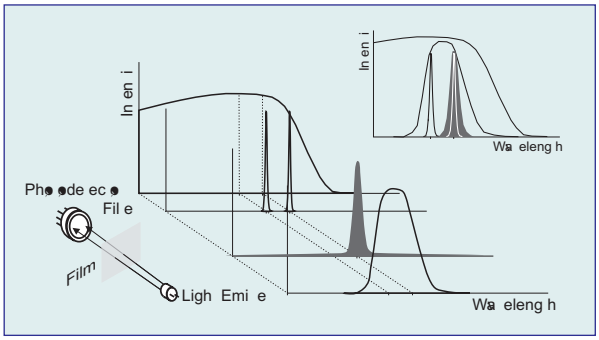
T eIR etect te
t t eDX7010P ea
t eIR e tte te t
t eDX7011P e. T e
C ect eDX7012P
a c
eat a at O tca
Se a e tec t
PC t t eRS-232 t.
A at t DC/DC c ete
ace a C ect
e a Se
.
A at a e tec ecte a
t te - a .
S te I te ace.

Detector and Emitter Modules

Collector Modules

Principles of Operation

T eNDIR (N -D e eI a-Re
S ct c) ca e et et
e ete t eDX7000P e .
T ec a ca b ec a e c e t e.
I te t t tbea , a e t
ca , a ec a e.
O e t tbea (ca c a e) a
a ee t c a te t tca
ab t e ec ca e
ate a. T ea t e e(e e cec a e)
e c t a t a ee t a
ace t t eab t e.



The principle of film thickness measurement

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Vision Software

T e RMT Lt a e e . e t e DX7000
V . . . a . . c a . . . .
t t e DX7000 P S e . .

T e DX7000 V . . a t e . e t e ace
a . . t e a t e U e . . c a
. . . e e.

T e DX7000 V . . t a e CD e e e
t t e DX7000 S e . .

T . t e DX7000 V . . t a e, t e
te t ect e cee t e . . .
a a ea t a e e e t:

- I te Pe t ca c . te t
  W . . 95/98/2000 . eat te
- F ee COM . t
- 16 MB RAM (32 MB
  c . e e)
- 6 MB ee a . ace
- CD ROM . e
- M e c . at b e . t . e ce

T e DX7000 V . . t a e . a
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. . e . eat . . t e a . e e t . t e
O t ca S e : TE c . e , . t etect ,
t e tte.

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Specifications

Type NDIR spectrometer
Detector Lead selenide thermoelectric cooler
Measured Material PE and PP with selected EVOH and other barrier layers

Detector

Measurement range	PE, PP	PE, PP	EVOH
Measurement range	3.60	3.70	2.80
Recommended range	4.00	4.10	2.60

Parameters

Full scale	0...50	0...350	0...40
Repeatability	0.5 %	1.0 %	0.25 %
Accuracy [1]	0.5	2.0	0.5 %
Sample distance	10	10	10

Timing

Sensor response [2] 0.01 s

Alarms

Light Thickness LED
Sound > 85 dB

Supply requirements

Supply voltage +12 to +35 V DC
Max power 4.0 W
Nominal power 2.5 W

Interfaces

Data RS-232C
Analog 0...4.095 V

Operation conditions

Temperature range 0 to 50 C
Relative humidity 0 to 95%

Dimensions

Emitter module 56 71 45
Detector module 56 71 36
Connector module 131 69 25

Weight

Emitter module 220
Detector module 210
Connector module 250

1) *At Averaging Time Constant equal 0.2 s.*
2) *Software Adjustable*

Standard Kit

#	Item	Code	Quan.
1	Detector module	DX7010P	1
2	Emitter module	DX7011P	1
3	Collector module	DX7012P	1
4	System interface cable	DX7010-C-31	2
5	RS-232 cable	DX7010-C-33/9	1
6	Power supply cable	DX7010-C-32	1
7	DX7000 Plus User's Manual		1
8	DX7000 Vision software CD		1

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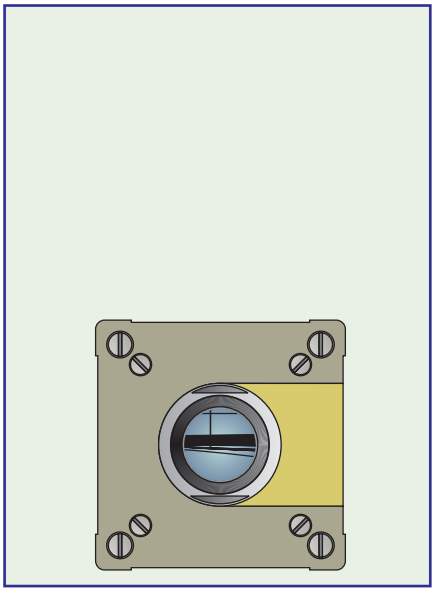

DX7010P Detector module*(in millimeters)*

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