

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SIMATIC S7

6ES7151-8AB00-0AB0

IM151-8 PN/DP CPU

Used with the applicable SIMATIC ET 200S configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official product documentation



SIMATIC DP,
IM151-8 PN/DP CPU FOR ET200S,
128 KB WORKING MEMORY,
INT. PROFINET INTERFACE (WITH THREE RJ45 PORTS)
AS IO-CONTROLLER,
W/O BATTERY MMC REQUIRED

Supply voltage	
24 V DC	Ja
Voedingsspanning / bij DC / nominale waarde / minimaal	20,4 V
Voedingsspanning / bij DC / nominale waarde / maximaal	28,8 V
Productfunctie / bescherming tegen onjuiste polariteit	Ja
Mains buffering	
Mains/voltage failure buffering time	5 ms
Input current	
Inrush current, max.	1,8 A
Spanningen en stromen / I²t	0,21 A²·s
from supply voltage 1L+, max.	380 mA
Output current	
Current output to backplane bus (5 V DC), max.	700 mA
Power loss	
Werkelijk vermogensverlies / typisch	5,5 W
Memory	
Work memory	
integrated	128 kbyte

expandable	Nee
Size of retentive memory for retentive data blocks	64 kbyte
Load memory	
Plug-in (MMC)	Ja
Plug-in (MMC), max.	8 Mbyte
Data management on MMC (after last programming), min.	10 a
Backup	
present	Ja
CPU processing times	
for bit operations, typ.	0,1 µs
for word operations, typ.	0,2 µs
for fixed point arithmetic, typ.	2 µs
for floating point arithmetic, typ.	3 µs
CPU-blocks	
Number of blocks (total)	1024
DB	
Number, max.	511
Size, max.	64 kbyte
FB	
Number, max.	1024
Size, max.	64 kbyte
FC	
Number, max.	1024
Size, max.	64 kbyte
OB	
Size, max.	64 kbyte
Number of free cycle OBs	1
Number of time alarm OBs	1
Number of delay alarm OBs	1
Number of time interrupt OBs	1
Number of process alarm OBs	1
Number of DPV1 alarm OBs	3
Number of startup OBs	1
Number of asynchronous error OBs	6
Number of synchronous error OBs	2
Nesting depth	
per priority class	16
additional within an error OB	4

Counters, timers and their retentivity	
S7 counter	
Number	256
of which retentive without battery	
adjustable	Ja
lower limit	0
upper limit	255
Retentivity	
adjustable	Ja
lower limit	0
upper limit	255
Counting range	
adjustable	Ja
lower limit	0
upper limit	999
IEC counter	
present	Ja
S7 times	
Number	256
of which retentive without battery	
adjustable	Ja
lower limit	0
upper limit	255
Retentivity	
adjustable	Ja
lower limit	0
upper limit	255
Time range	
lower limit	10 ms
upper limit	9990 s
IEC timer	
present	Ja
Data areas and their retentivity	
Flag	
Number, max.	256 byte
Retentivity available	Ja
Number of clock memories	8
Data blocks	