

Services	CPU 41x-3 PN/DP	CPU 412 PN	CPU 314C-2 PN	CPU 315-2 PN/DP and CPU 317-2 PN/DP	CPU 319-3 PN/DP	IM 151-8 PN/DP CPU	IM 154-8 CPU	WinAC RTX (F)
<b>S7 communication</b>	x	x	x	x <sup>1</sup>	x <sup>1</sup>	x <sup>1</sup>	x <sup>1</sup>	x
<b>Open communication via IE</b>	x	x	x	x	x	x	x	x
ISO transport protocol	-	-	-	-	-	-	-	-
ISO-on-TCP protocol	x	x	x	x <sup>2)</sup>	x	x	x	x <sup>11)</sup>
TCP protocol	x	x	x	x	x	x	x	x
UDP protocol	x	x	x	x <sup>2)</sup>	x	x	x	x
<b>IT communication</b>								
E-mail client	-	-	-	-	-	-	-	-
HTML utilities (Web server)	x	x	x	x <sup>2)</sup>	x <sup>2)</sup>	x	x	x <sup>11)</sup>
FTP server	-	-	-	-	-	-	-	-
FTP client	-	-	-	-	-	-	-	-
<b>IP access protection (IP-ACL)</b>	-	-	-	-	-	-	-	-
<b>IP configuration</b>	x <sup>15)</sup>	x <sup>15)</sup>	x	x <sup>14)</sup>	x <sup>14)</sup>	x <sup>14)</sup>	x <sup>14)</sup>	-
<b>PG/OP communication</b>	x	x	x	x	x	x	x	x
<b>SNMP protocol</b>	x	x	x	x <sup>2)</sup>	x	x	x	x
<b>PROFINET IO controller</b>	x	x	x	x <sup>2)</sup>	x	x	x	x
<b>PROFINET IO devices</b>	x <sup>12)</sup>	x	x	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	-
<b>PROFINET CBA</b>	x	x	x	x	x	x	x	x
<b>Media Redundancy Protocol (MRP)</b>	x <sup>12)</sup>	x	x	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>11)</sup>
<b>Shared device</b>	x <sup>12)</sup>	x	x	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>13)</sup>	x <sup>11)</sup>
<b>S7 routing</b>	x	x	x	x	x	x <sup>3)</sup>	x	x
<b>Data set routing</b>	x <sup>21)</sup>	x	x	x <sup>20)</sup>	x <sup>19)</sup>	x <sup>3)13)</sup>	x <sup>13)</sup>	x <sup>11)</sup>
<b>Time-of-day synchronization</b>	x	x	x	x	x	x	x	x
SIMATIC process	-	-	-	-	-	-	-	-
NTP mode (as time client)	x	x	x	x <sup>2)</sup>	x	x	x	x
<b>Connections (physical)</b>								
Ethernet / PROFINET	2xRJ45 (2-port switch)	2xRJ45 (2-port switch)	2xRJ45 (2-port switch)	2xRJ45 (2-port switch) <sup>16)</sup>	2xRJ45 (2-port switch) <sup>17)</sup>	3xRJ45	2xM12 d-coded, 1xRJ45	x <sup>8)</sup>
PROFIBUS	2xRS485	1xRS485	1xRS485	1xRS485	2xRS485	x <sup>7)</sup>	1xRS485	x <sup>9)</sup>
<b>Transmission rates</b>								
10 Mbit/s	x	x	x	x	x	x	x	x
100 Mbit/s	x	x	x	x	x	x	x	x
<b>Quantity frameworks</b>								
Number of possible connections for communication services	62 and 94	46	8	8 and 16	32	8	8	32
Amount of user data with TCP protocol	32 Kbytes	32 Kbytes	32 bytes <sup>5)</sup> 1460 bytes <sup>4)</sup>	32 Kbytes <sup>5)6)</sup> 1460 bytes <sup>4)</sup>	32 bytes <sup>5)18)</sup> 1460 bytes <sup>4)</sup>	32 bytes <sup>5)18)</sup> 1460 bytes <sup>4)</sup>	32 bytes <sup>5)18)</sup> 1460 bytes <sup>4)</sup>	32 Kbytes
Amount of user data with ISO-on-TCP	32 Kbytes	32 Kbytes	32 Kbytes	32 Kbytes <sup>6)</sup>	32 bytes <sup>18)</sup>	32 bytes <sup>18)</sup>	32 bytes <sup>18)</sup>	32 Kbytes
Amount of user data with UDP protocol	1472 bytes	1472 bytes	1472 bytes	1472 bytes	1472 bytes	1472 bytes	1472 bytes	1472 bytes
Number of S7 communications	64 and 96	48	10	14 / 16	16	10	16	x <sup>10)</sup>
Number of PG connections	63 and 95	47	11	15 / 31	31	11	15	x <sup>10)</sup>
Number of OP connections	63 and 95	47	11	15 / 31	31	11	15	x <sup>10)</sup>

<sup>1)</sup> The CPU supports S7 Communication as server and client via the PN interface.

The CPU supports S7 Communication only as server via the DP interface.

<sup>2)</sup> The function or service is supported as from firmware V2.5.

<sup>3)</sup> The S7 Routing function is supported with slotted DP master module.

<sup>4)</sup> If connection type = 01<sub>HEX</sub>

<sup>5)</sup> If connection type = 11<sub>HEX</sub>

<sup>6)</sup> As from firmware V3.1 (with firmware < V3.1 max. 8192 bytes)

<sup>7)</sup> The IM151-8 PN/DP CPU gets the RS485 interface via the DP master module.

<sup>8)</sup> WinAC RTX supports one IE or PROFINET interface. Possible interfaces:

- Intel Pro/1000 or the integrated IE interfaces of SIMATIC PC

- CP1616, CP1604 or the integrated PN interfaces of the SIMATIC PC and S7-mEC

<sup>9)</sup> WinAC RTX supports up to 4 PROFIBUS interfaces:

- max. 1xCP5611 (A2), CP5621 or integrated PROFIBUS interface of the SIMATIC PC and/or

- up to 4xCP5613 (A2), CP5603

<sup>10)</sup> Depending on the interface:

- CP5611 (A2), CP5621 or integrated PROFIBUS interface of the SIMATIC PC: max. 8

- CP5613 (A2) or CP5603: max. 50

- Intel Pro/1000 or the integrated IE interfaces of SIMATIC PC: max. 16

- CP1616, CP1604 or the integrated PN interfaces of the SIMATIC PC and S7-mEC: max. 32

<sup>11)</sup> The function or service is supported as from firmware V4.6 (WinAC RTX (F) 2010).

<sup>12)</sup> The function or service is supported as from firmware V6.0.

<sup>13)</sup> The function or service is supported as from firmware V3.2.

<sup>14)</sup> From firmware V3.2 you can set and change the IP address via DCP (Discovery and Configuration Protocol) or via the user program with SFB104 "IP\_CONF".

<sup>15)</sup> From firmware V6.0 you can set and change the IP address via DCP (Discovery and Configuration Protocol) or via the user program with SFB104 "IP\_CONF".

<sup>16)</sup> From firmware V3.1 the hardware is provided with 2xRJ45 interfaces (2-port-switch).

<sup>17)</sup> From firmware V3.2 the hardware is provided with 2xRJ45 interfaces (2-port-switch).

<sup>18)</sup> As from firmware V3.2 (with firmware < V3.2 max. 8192 bytes)

<sup>19)</sup> The function or service is supported as from firmware V2.7.

<sup>20)</sup> The function or service is supported as from firmware V3.1.

<sup>21)</sup> The function or service is supported as from firmware V5.1.