## **SIEMENS**

**Data sheet** 6XV1875-5CH20

## product type designation

product description

## antenna connection cable N-Connect/RSMA plug/plug

Connecting cable for SIMATIC NET antennas, preassembled

N-Connect/ R-SMA male/male flexible connection cable pre-assembled, length 2 m flexible connecting cable Access point antenna (RCoax and others).



suitability for use	Flexible connecting cable for connecting an antenna to an access point/client
wire length	2 m
electrical data	
number of electrical connections	2
type of electrical connection	N-Connect/R-SMA male/male
transmission frequency	0 6000 MHz
attenuation factor per length	
at 2.4 GHz / typical	0.53 dB/m
• at 5.2 GHz / typical	0.83 dB/m
• at 5.85 GHz / typical	0.89 dB/m
return loss	
• minimum	23 dB
impedance	
• rated value	50 Ω
capacity per length / at 1 kHz	82 pF/m
relative speed	82 %
mechanical data	
design of the shield	Braided shield made of tin-plated copper wires
outer diameter	
<ul> <li>of inner conductor</li> </ul>	1.4 mm
• of dielectric	3.8 mm
of cable sheath	6.3 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
thickness / of cable sheath	0.76 mm
material	
<ul> <li>of inner conductor</li> </ul>	Cu
• of dielectric	polyethylene foam
of cable sheath	FRNC
color	
of cable sheath	pastel turquoise
bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	32 mm
with multiple bends / minimum permissible	45 mm
tensile load / maximum	80 N
weight per length	75 kg/km
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +80 °C

• during storage     • during transport     • during installation		
◆ during installation     chemical resistance     ◆ to mineral oil     conditional resistance     * to mineral oil     resistant     protection class IP     IP68; when plugged in     product features, product functions, product components / general     product feature	during storage	-40 +80 °C
chemical resistance  • to mineral oil conditional resistance  • to mineral oil radiological resistance / to UV radiation resistant protection class IP IP68; when plugged in product features, product functions, product components / general  product feature  • halogen-free Yes  • silicon-free Yes  standards, specifications, approvals  certificate of suitability  • EAC approval Yes  • RoHS conformity Yes  • fire protection in accordance with EN 45545-2 No  standard  • for fire behavior / flame resistance UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  reference code  • according to IEC 81346-2 WG  • according to IEC 81346-2:2019 WGB  further information / internet links  internet link  • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industrial communication • to website: Industry Mall • to website: Industry Mall • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Industry siemens.com/finitions.emens.emens	<ul> <li>during transport</li> </ul>	-40 +80 °C
• to mineral oil radiological resistance / to UV radiation protection class IP product features, product functions, product components / general product feature • halogen-free • halogen-free • silicon-free  * Yes • silicon-free  * Yes  * standards, specifications, approvals  certificate of suitability • EAC approval • RoHS conformity • fire protection in accordance with EN 45545-2 No  standard • for fire behavior / flame resistance  • according to IEC 81346-2 • according to IEC 81346-2:2019  further information / Internet links  internet link • to web page: selection aid TIA Selection Tool • to website: Industry Mall • to website: Industry Mall • to website: Industry Mall • to website: Information and Download Center	during installation	-25 +80 °C
radiological resistance / to UV radiation resistant protection class IP IP68; when plugged in product features	chemical resistance	
product features, product functions, product components / general product feature	to mineral oil	conditional resistance
product feature	radiological resistance / to UV radiation	resistant
product feature	protection class IP	IP68; when plugged in
halogen-free Yes     silicon-free Yes  standards, specifications, approvals  certificate of suitability     EAC approval Yes     RoHS conformity Yes     fire protection in accordance with EN 45545-2 No  standard     for fire behavior / flame resistance UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  reference code     according to IEC 81346-2 WG     according to IEC 81346-2:2019 WGB  further information / internet links  internet link     to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall     to website: Industry Mall     to website: Information and Download Center     to website: Selection guide for cables and connectors     to website: Image database     to website: Image database     to website: Image database     to website: CAx-Download-Manager  http://www.siemens.com/bilddb     http://www.siemens.com/bilddb     http://www.siemens.com/bilddb     http://www.siemens.com/bilddb     http://www.siemens.com/cax	product features, product functions, product components / general	
silicon-free Yes  standards, specifications, approvals  certificate of suitability	product feature	
standards, specifications, approvals  certificate of suitability  • EAC approval  • RoHS conformity  • fire protection in accordance with EN 45545-2  standard  • for fire behavior / flame resistance  • for fire behavior / flame resistance  • according to IEC 81346-2  • according to IEC 81346-2:2019  **WG  **according to IEC 81346-2:2019  **WGB  **further information / internet links*  internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: Image database  • to website: CAx-Download-Manager	<ul><li>halogen-free</li></ul>	Yes
certificate of suitability  • EAC approval  • RoHS conformity  • fire protection in accordance with EN 45545-2  standard  • for fire behavior / flame resistance  • according to IEC 81346-2  • according to IEC 81346-2:2019  **Turther information / internet links*  internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  **Yes  Yes  Yes  Yes  No  **Yes  Yes  No  **UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  **WG  WG  **WG  **WGB  **Internet link  • to web page: selection aid TIA Selection Tool  • to to website: Industrial communication  • http://www.siemens.com/tia-selection-tool  • http://www.siemens.com/simatic-net  • http://www.siemens.com/industry/siemens.com/  • http://www.siemens.com/industry/infocenter  • https://sie.ag/2Qd/kcP  • http://www.siemens.com/bilddb  • to website: CAx-Download-Manager  • http://www.siemens.com/cax	• silicon-free	Yes
EAC approval     RoHS conformity     Fire protection in accordance with EN 45545-2     No  standard     for fire behavior / flame resistance     UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  reference code     according to IEC 81346-2     according to IEC 81346-2:2019  WG  further information / internet links  internet link      to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall     to website: Information and Download Center     to website: Selection guide for cables and connectors     to website: Image database     to website: CAx-Download-Manager  Yes     Yes     No  No  WG  WG  WG  WG  Http://www.siemens.com/(tia-selection-tool)  http://www.siemens.com/fia-selection-tool  http://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net  http://www.siemens.com/industry/infocenter  http://www.siemens.com/industry/infocenter  http://www.siemens.com/bilddb  http://www.siemens.com/cax	standards, specifications, approvals	
RoHS conformity  If the protection in accordance with EN 45545-2  Internation of the behavior / flame resistance  Internation of the behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  Internation of the behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  Internation of the behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  Internation of the behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  WG  WG  Internation of the behavior / flame resistance  WG  Internation of the behavior / f	certificate of suitability	
• fire protection in accordance with EN 45545-2  standard  • for fire behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  reference code  • according to IEC 81346-2  • according to IEC 81346-2:2019  WGB  further information / internet links  internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  http://www.siemens.com/cax  No  WG  WG  HG  WG  HTD://www.siemens.com/tia-selection-tool  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://wall.industry.siemens.com/ https://sie.ag/2Od/xcP  https://sie.ag/2Od/xcP  http://www.siemens.com/bilddb  http://www.siemens.com/cax	<ul> <li>EAC approval</li> </ul>	Yes
standard  • for fire behavior / flame resistance  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  reference code  • according to IEC 81346-2  • according to IEC 81346-2:2019  WGB  further information / internet links  internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  WG  WG  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/fia-selection-tool  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  http://www.siemens.com/industry/infocenter  http://www.siemens.com/industry/infocenter  http://www.siemens.com/bilddb  http://www.siemens.com/cax	<ul> <li>RoHS conformity</li> </ul>	Yes
• for fire behavior / flame resistance  reference code     • according to IEC 81346-2     • according to IEC 81346-2:2019  wGB  further information / internet links  internet link  • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager  uL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)  WG  WG  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net	<ul> <li>fire protection in accordance with EN 45545-2</li> </ul>	No
reference code  • according to IEC 81346-2  • according to IEC 81346-2:2019  WGB  further information / internet links  internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  wGB  WGB  WGB  Http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/industry/infocenter  http://www.siemens.com/bilddb  http://automation.siemens.com/bilddb  http://www.siemens.com/cax	standard	
according to IEC 81346-2  according to IEC 81346-2:2019  WGB  further information / internet links  internet link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Selection guide for cables and connectors  to website: Image database  to website: Image database  to website: CAx-Download-Manager  wGB  WGB  WGB  WGB  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/ https://sie.ag/2QdlxcP  https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb  http://www.siemens.com/cax	<ul> <li>for fire behavior / flame resistance</li> </ul>	UL 1685 (Vertical tray), UL 1581 Sec. 1090 (H)
according to IEC 81346-2:2019  further information / internet links  internet link      to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall     to website: Information and Download Center     to website: Selection guide for cables and connectors     to website: Image database     to website: Image database     to website: CAx-Download-Manager  wGB  WGB  WGB  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/industry/infocenter  https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb  http://www.siemens.com/cax	reference code	
internet link  • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager  http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com/ http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb	<ul><li>according to IEC 81346-2</li></ul>	WG
internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager	<ul> <li>according to IEC 81346-2:2019</li> </ul>	WGB
<ul> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>http://www.siemens.com/tia-selection-tool</li> <li>https://www.siemens.com/simatic-net</li> <li>https://www.siemens.com/industry/infocenter</li> <li>https://sie.ag/2QdlxcP</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	further information / internet links	
<ul> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>http://www.siemens.com/simatic-net</li> <li>https://mall.industry.siemens.com/</li> <li>http://www.siemens.com/industry/infocenter</li> <li>https://sie.ag/2QdlxcP</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	internet link	
<ul> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>https://www.siemens.com/industry/infocenter</li> <li>https://sie.ag/2QdlxcP</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	http://www.siemens.com/tia-selection-tool
<ul> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>http://www.siemens.com/industry/infocenter</li> <li>https://sie.ag/2QdlxcP</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	• to website: Industrial communication	http://www.siemens.com/simatic-net
<ul> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	to website: Industry Mall	https://mall.industry.siemens.com
<ul> <li>◆ to website: Image database</li> <li>◆ to website: CAx-Download-Manager</li> <li>http://automation.siemens.com/bilddb</li> <li>http://www.siemens.com/cax</li> </ul>	<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
• to website: CAx-Download-Manager http://www.siemens.com/cax	• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
	to website: Image database	http://automation.siemens.com/bilddb
• to website: Industry Online Support  https://support.industry.siemens.com	• to website: CAx-Download-Manager	http://www.siemens.com/cax
	• to website: Industry Online Support	https://support.industry.siemens.com

last modified: 7/7/2022 🖸