



PROFINESS

VERBINDUNGS- & MONTAGESYSTEME

■ Mounting system for flat roofs

Presentation / Construction



 **DEKRA**
INDUSTRIAL
BAUART GEPRÜFT

MOUNTING SYSTEM FOR FLAT ROOFS

- Mounting system for photovoltaic plants on flat roofs.
- Our innovative system uses racking and aerodynamic effects to ensure stability.
- Since 2011 > 900 photovoltaic plants were built with a total output of more than 25 MW.
- Through different mounting angles (South 10°/15°, East/West 10°) and individual occupancy possibilities, you can achieve the best possible yields with your PV system.
- The mounting system is preassembled to a very high degree to minimize the on-site assembly work.



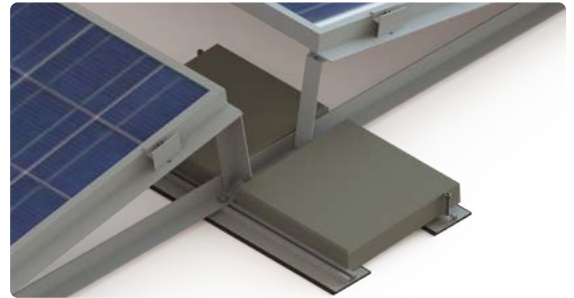
- Orientation: South (or one-way in another direction) and East-West
- Surface load including module: ~ 8kg per square meter of roof area (south system, plus ballast)
- Building protection: incl. Plasticizer barrier (film release on request)
- Minimum system size: none
- ISO-certified manufacturing company (ISO 9001 / ISO 14001)
- Aerodynamically certified by the I.F.I. Institute for Industrial Aerodynamics at Aachen University of Applied Sciences



VERSION EAST-WEST

- Module mounting angle 10° with integrated base plates on Regupol building protection
- Row connector with long hole for length compensation
- Ballast holder integrated into the base rail for optimum power transmission
- Comparatively small ballast necessary (sometimes completely without ballast)
- Ballasting plan is calculated by our structural engineer on a project-specific basis

Cross section: 2.33 meters for 2 modules, 4.60 meters for 4 modules in east-west direction (modules <1000mm frame) or
2.43 / 4.80 meters (module 1001-1050mm frame) or
2.67 / 5.34 meters (module 1051-1170mm frame)



VERSION ROOF-PARALLEL LOADING SYSTEM

- Constructed from Profiness standard pitched roof components (trapezoidal rail, cross rail), therefore always fast availability
- Cross composite on flat profile rail with aerodynamic row spacing
- Over-ridge connector for securing against slipping off
- Ballast holder with screw connection in crossbar for optimum power transmission
- Low ballasting required, the ballasting plan is prepared by our structural engineer on a project-specific basis
- For your module layout planning, please assume a minimum edge distance of 20cm and a row distance of 9cm (modules lying landscape) and 14cm (modules lying portrait)

NEW

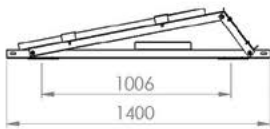


CROSS-SECTIONS SOUTH ELEVATION

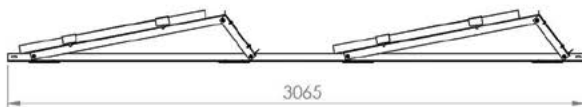
MOUNTING OVERVIEW

MODULES UP TO 1050mm FRAME WIDTH

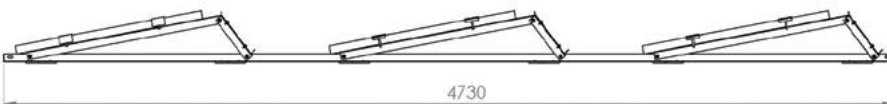
Standard dimension 10° system in north-south direction:



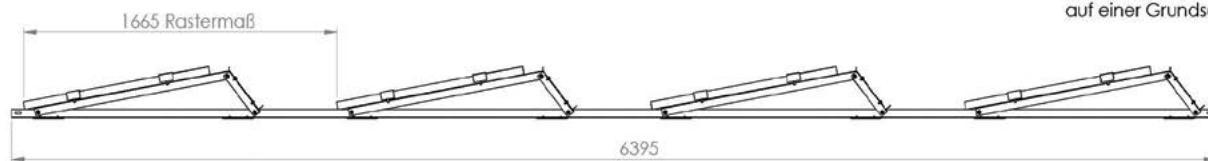
Variante 01:
ein Dreiecksständer
auf einer Grundschiene



Variante 02:
zwei Dreiecksständer
auf einer Grundschiene



Variante 03:
drei Dreiecksständer
auf einer Grundschiene

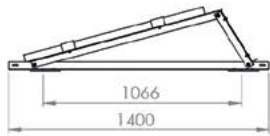


Variante 04:
vier Dreiecksständer
auf einer Grundschiene

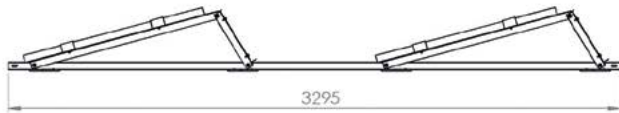


MODULES UP TO 1050mm FRAME WIDTH

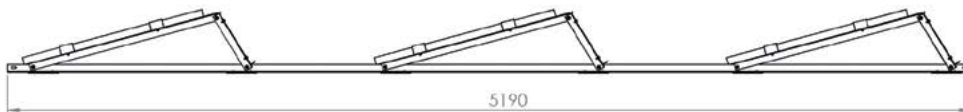
Standard dimension 15° system in north-south direction:



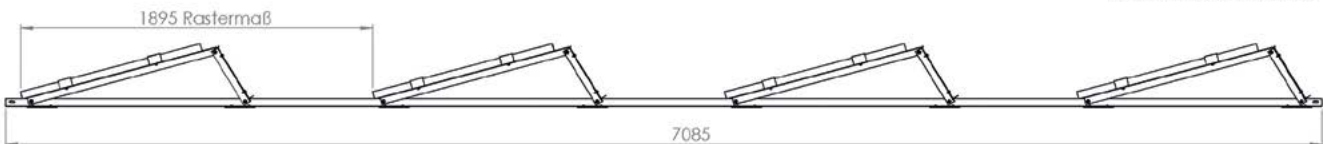
Variante 01:
ein Dreiecksständer
auf einer Grundschiene



Variante 02:
zwei Dreiecksständer
auf einer Grundschiene



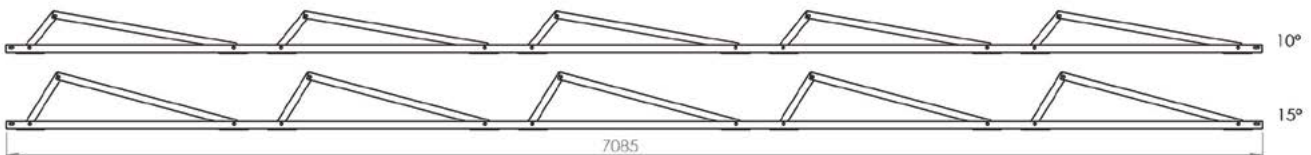
Variante 03:
drei Dreiecksständer
auf einer Grundschiene



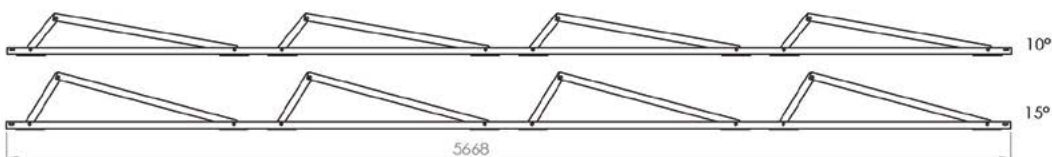
Variante 04:
vier Dreiecksständer
auf einer Grundschiene

MODULES UP TO 1050mm FRAME WIDTH

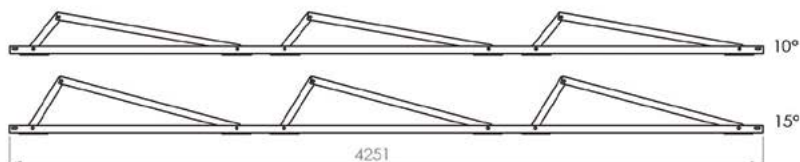
Short version 10° and 15° system in north-south direction:



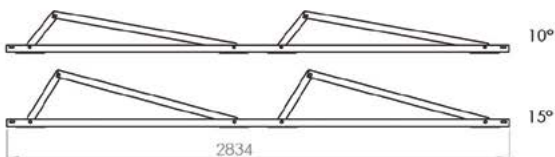
Variante 05:
fünf Dreiecksständer
auf einer Grundschiene



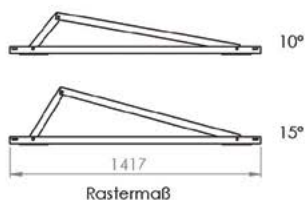
Variante 04:
vier Dreiecksständer
auf einer Grundschiene



Variante 03:
drei Dreiecksständer
auf einer Grundschiene



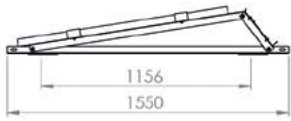
Variante 02:
zwei Dreiecksständer
auf einer Grundschiene



Variante 01:
ein Dreiecksständer
auf einer Grundschiene

MODULES 1051MM-1170mm FRAME WIDTH

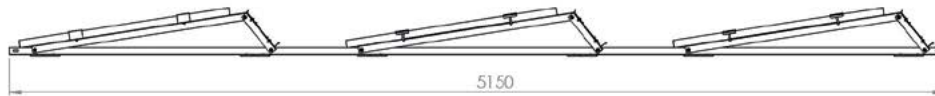
Standard dimension 9° system in north-south direction:



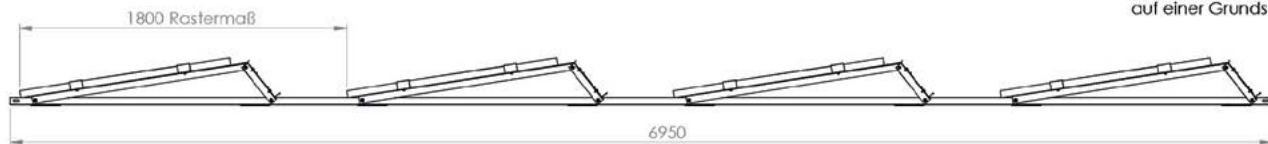
Variante 01:
ein Dreiecksständer
auf einer Grundschiene



Variante 02:
zwei Dreiecksständer
auf einer Grundschiene



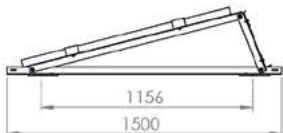
Variante 03:
drei Dreiecksständer
auf einer Grundschiene



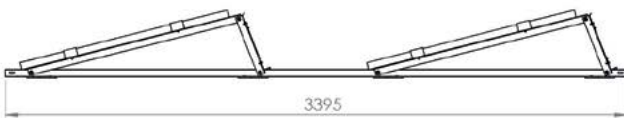
Variante 04:
vier Dreiecksständer
auf einer Grundschiene

MODULES 1051MM-1170mm FRAME WIDTH

Standard dimension 14,3° system in north-south direction:



Variante 01:
ein Dreiecksständer
auf einer Grundschiene



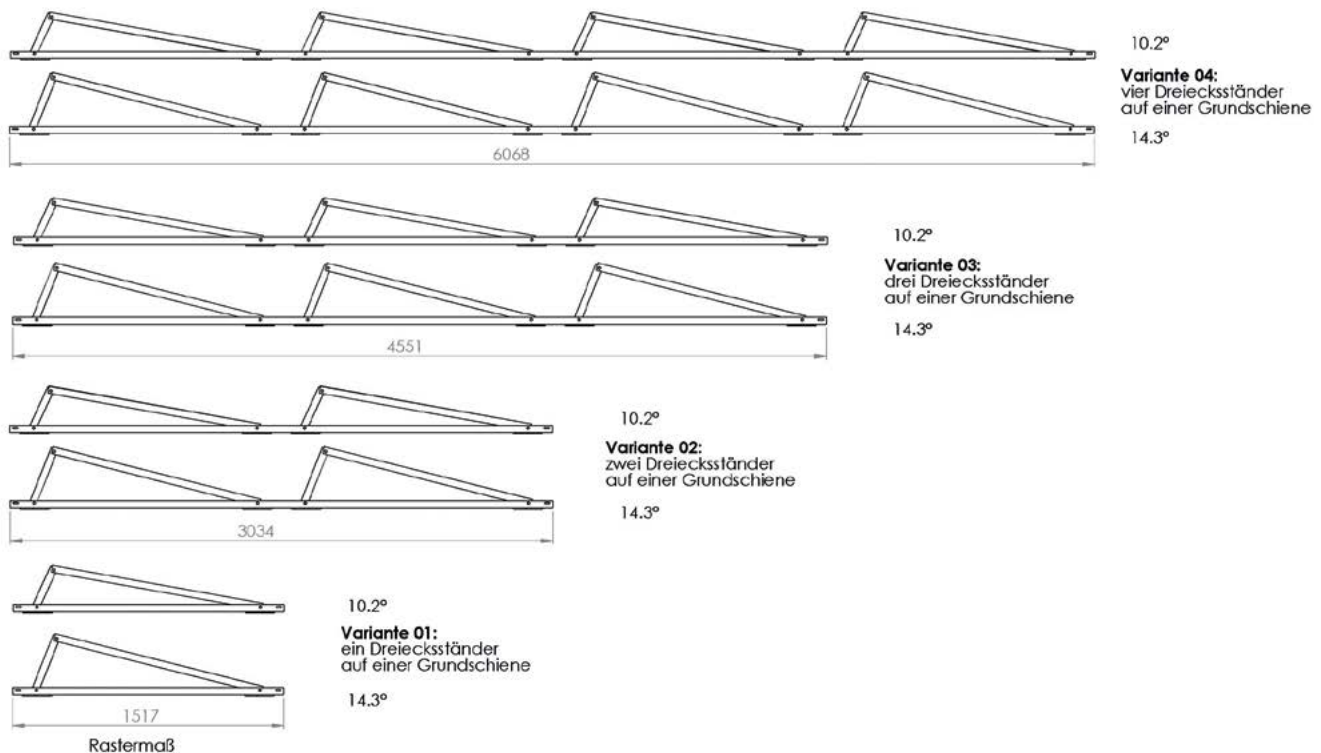
Variante 02:
zwei Dreiecksständer
auf einer Grundschiene



Variante 03:
drei Dreiecksständer
auf einer Grundschiene

MODULES 1051MM-1170mm FRAME WIDTH

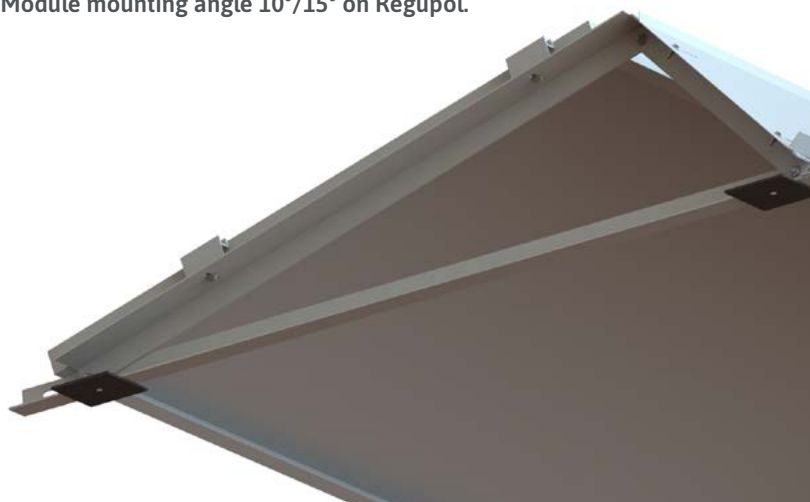
Shortened system 9° / 14.3° system in north-south direction:



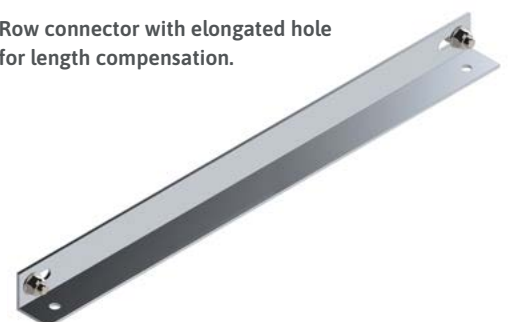
SOUTH ELEVATION CONSTRUCTION

- Module mounting bracket 10° / 15° depending on version with integrated foot plates, generally on Regupol
- Row connector with elongated hole for length compensation
- Ballast holder on Regupol, alternatively ballasting via wind deflector plate
- Wind deflector plate with elongated holes for expansion compensation

Module mounting angle 10°/15° on Regupol.

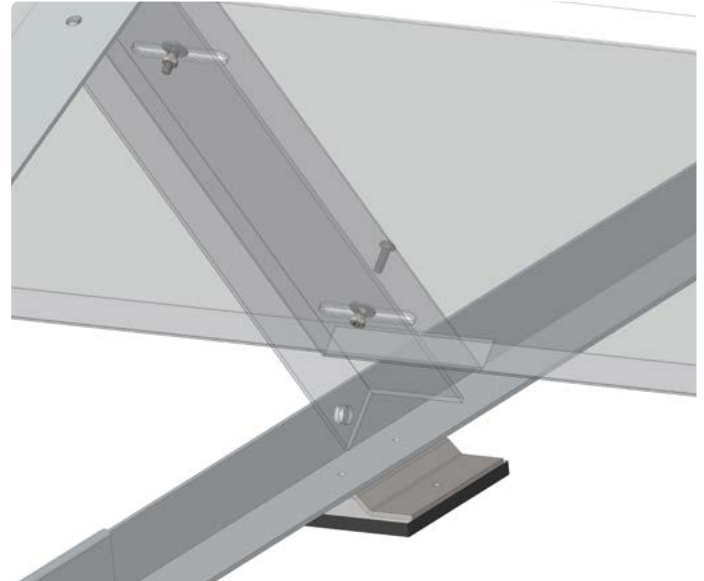


Row connector with elongated hole
for length compensation.

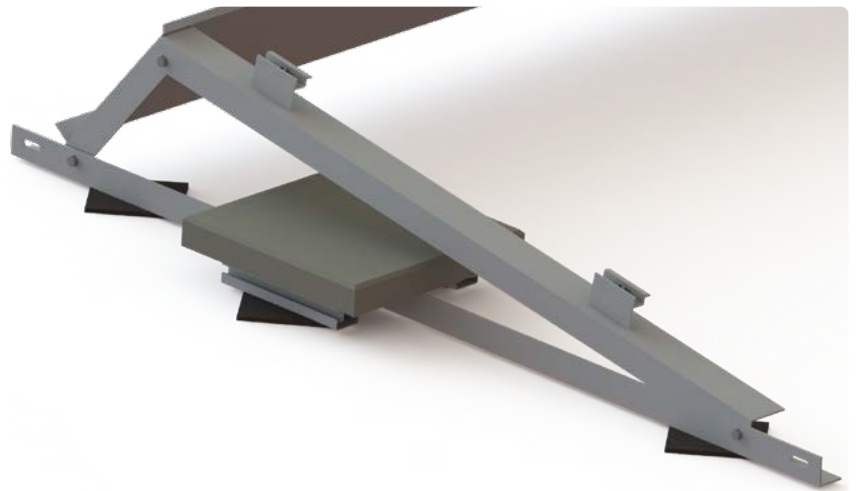
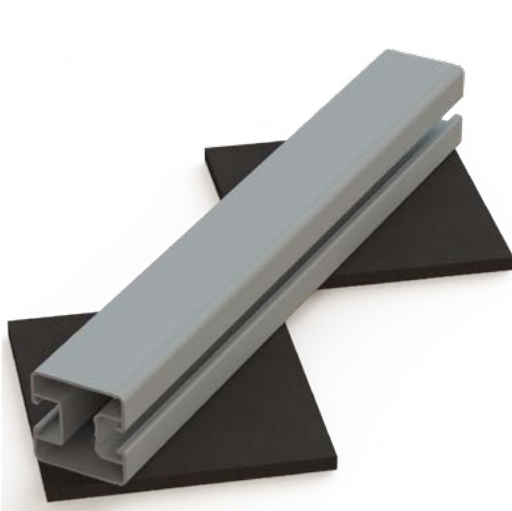


Wind deflector with elongated holes
for expansion compensation. If
necessary, also edged for
ballast support.



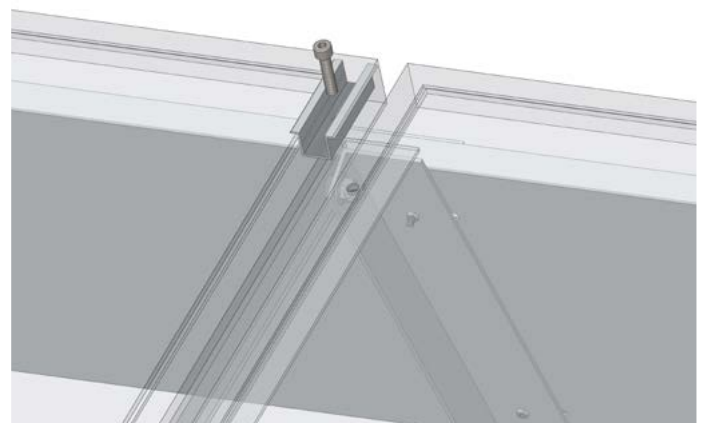


- Mount the wind deflector plates overlapping on the press-in threaded nuts of the support profiles. Do not tighten the screws yet.



- Position the ballast holders on the base rails (L-profiles) according to the ballast plan, if additional ballast is required that does not fit into the wind deflectors.

We manufacture ballast holders in the desired length (depending on the size of the weight plates used) and with one or two Regupol pads. It is recommended to use two ballast holders per ballast point so that the ballast lies as centrally as possible above the base rail.



- Place the modules in position and screw them into the press-in threaded nuts using the middle or end clamps. Then tighten the wind deflectors.

CHECKLIST FOR AERODYNAMIC SYSTEMS

(flat roof & slightly pitched roofs)




customer address		project location (if different location)	
name	<input type="text"/>	name	<input type="text"/>
street	<input type="text"/>	street	<input type="text"/>
city	<input type="text"/>	city	<input type="text"/>
phone	<input type="text"/>	phone	<input type="text"/>

building/location data			
roof pitch degree	<input type="text"/>	roof pitch in direction	<input type="text"/>
building height	<input type="text"/>	length building edge east m	<input type="text"/>
length building edge north m	<input type="text"/>	terrain height m	<input type="text"/>
wind load kN/m ²	<input type="text"/>	snow load kN/m ²	<input type="text"/>

* Mandatory information for enquiries outside Germany

solar panel data				
quantity	<input type="text"/>	length mm	<input type="text"/>	width mm
height mm	<input type="text"/>	weight kg	<input type="text"/>	

roof information			
roof surface	<input type="text"/>	load reserve kg/m ²	<input type="text"/>
is there an attic/parapet?	<input type="text"/>	height of attic/parapet cm	<input type="text"/>
Is there an insulation?	<input type="text"/>	type	<input type="text"/>
thickness mm	<input type="text"/>		
additional comments:			

mounting system		
mounting system <input type="text"/>		
<p>flat roof aerodynamic system - south 10° or 15°</p> 	<p>flat roof aerodynamic system – east/west 10°</p> 	<p>slightly tilted roofs roof-parallel ballast system</p> 
<p>We will choose the fitting variation of our mounting system according to your panel dimensions and available space on the roof. The dimensions of the mounting systems will be apparent in your individual offer.</p> <p>Please sketch the planned array design or send us a layout plan!</p>		

CONTACT

Michael Schreiber

Managing Director

Tel.: +49 (0)208 - 30 96 19 - 0

Mail: m.schreiber@profiness.de

Ulrich Kamp

Sales

Tel.: +49 (0)208 - 30 96 19 - 01

Mail: u.kamp@profiness.de

Gabriele Zsori

Sales

Tel.: +49 (0)208 - 30 96 19 - 02

Mail: g.zsori@profiness.de

Jan Matten

Sales

Tel.: +49 (0)208 - 30 96 19 - 03

Mail: j.matten@profiness.de

Björn ter Schüren

Sales

Tel.: +49 (0)208 - 30 96 19 - 04

Mail: b.terschueren@profiness.de

Sabine Plott

Sales

Tel.: +49 (0)208 - 30 96 19 - 05

Mail: s.plott@profiness.de



PROFINESS GmbH

Broicher Waldweg 42
45478 Mülheim a.d. Ruhr

info@profiness.de (24h)
www.profiness.de

Tel.: +49 (0)208 - 30 96 19 - 0
Fax: +49 (0)208 - 30 96 19 - 09
